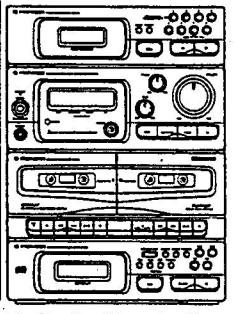
Service Manual

PIONEER®
The Art of Entertainment



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The chapter 1 of this Service Manual will not be reprinted. On your additional orders, we may supply only the chapter 2. For the chapter 1, please make copies and attach to the chapter 2 at your side if necessary.

STEREO DOUBLE DECK CD RECEIVER

XR-P240C

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Remarks
	XR-P240C		
HBXJ	○	AC240V	The power voltage can not be changed to AC220-230V.

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CHAPTER 1

1.1 SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

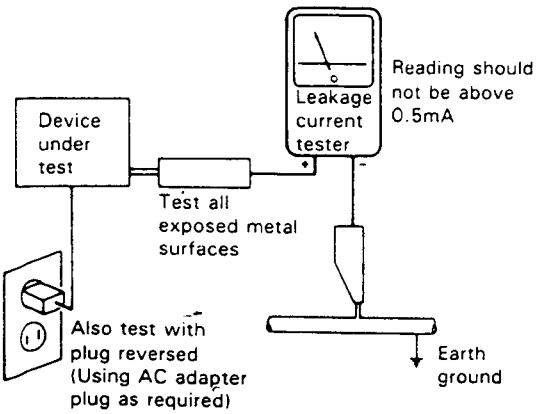
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Reading should not be above 0.5mA
Leakage current tester
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

(FOR EUROPEAN MODEL ONLY)

VARO!
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

ADVERSEL:
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSAETTELSE FOR STRÅLING.

VARNING!
OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.

LASER
Kuva 1
Lasersateilyn varoitusmerkki

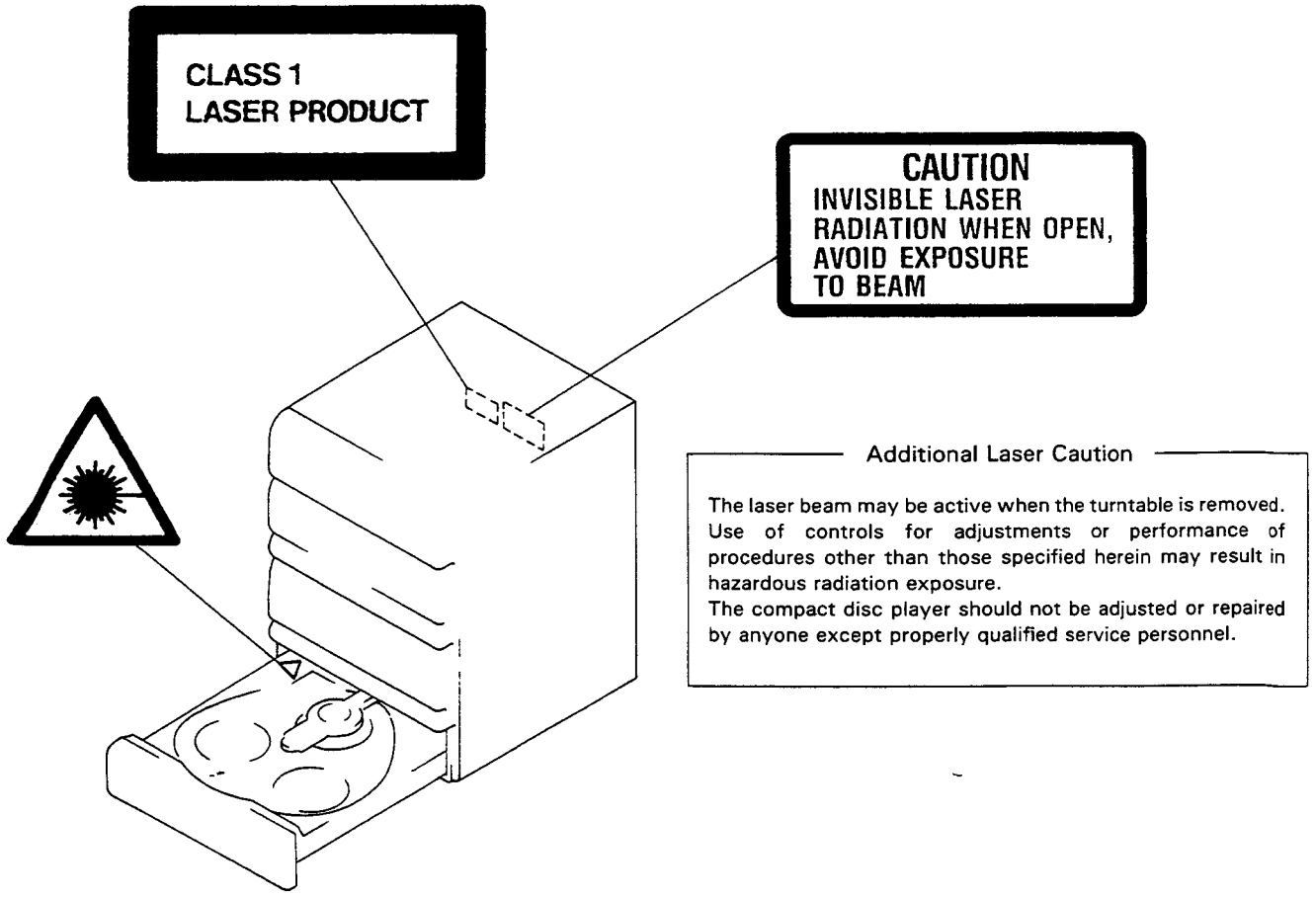
WARNING!
DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE.

IMPORTANT
THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

LASER DIODE CHARACTERISTICS
MAXIMUM OUTPUT POWER: 5 mw
WAVELENGTH: 780-785 nm

LASER
Picture 1
Warning sign for laser radiation

LABEL CHECK



Additional Laser Caution

The laser beam may be active when the turntable is removed. Use of controls for adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
The compact disc player should not be adjusted or repaired by anyone except properly qualified service personnel.

1.2 SPECIFICATIONS

STEREO DECK CD RECEIVER: XR-P240C

Amplifier section

<U.S. and Canadian models>

Continuous Average Power Output is 25 Watts* per channel, min., at 8 ohms from 80 Hertz to 15,000 Hertz with no more than 1 % total harmonic distortion.**

Continuous Power Output (RMS) ..... 30 W + 30 W
(1 kHz, T.H.D. 10%, 8 Ω)

<U.K. and Australian models>

Continuous Power output (DIN)
.....15 W+15 W (1 kHz, T.H.D. 1%, 8 Ω)
Continuous Power output (RMS)
.....20 W+20 W (1 kHz, T.H.D. 10%, 8 Ω)

FM/AM tuner section

FM Tuner Section

Frequency Range
U.S., Canadian and Australian models
..... 87.9–108.0 MHz
U.K. model ..... 87.5–108.0 MHz
Antenna Input..... 75 ohms unbalanced

AM Tuner Section

Frequency Range
With 10 kHz step ..... 530 kHz to 1,720 kHz
With 9 kHz step ..... 522 kHz to 1,611 kHz
(U.K. model) ..... 531 kHz to 1,602 kHz
Antenna ..... Loop Antenna

CD Section

Type ..... Compact disc digital audio system
Wow and Flutter ..... Limit of measurement
(±0.001% W.PEAK) or less (EIAJ)

Cassette deck section

Systems ..... 4 track, 2-channel stereo
Heads..... Recording/playback head × 1
Playback head × 1
Erasing head × 1
Motor ..... DC servo motor × 1
Tape type ..... TYPE I (Normal) tape

Miscellaneous

Power Requirements
U.K. and Australian models ..... AC 240 V, 50/60 Hz
U.S. and Canadian model ..... AC 120 V, 60 Hz
Power Consumption
U.K. and Australian models ..... 110 W
U.S. and Canadian models..... 65 W
Dimensions ..... 280 (W) × 377 (H) × 334 (D) mm
11 (W) × 14-13/16 (H) × 13-1/8 (D) in
Weight (without package)
U.K. and Australian models ..... 8.5 kg
U.S. and Canadian models..... 8.9 kg (19 lb 10oz)

Accessories

Operating Instructions 1
Remote Control Unit 1
Dry Cell Batteries (R6P/AA)..... 2
FM Antenna..... 1
AM Loop Antenna 1

SPEAKER SYSTEM: S-P240

Enclosure..... Book-shelf style, bass reflex type
System..... 2-way 2-speaker system
Loudspeakers:
Woofer..... 13 cm (5 in.) cone type
Tweeter ..... 5.2 cm (2 in.) cone type
Nominal Impedance ..... 8 Ω
Dimensions ..... 190 (W) × 380 (H) × 201 (D) mm
7-1/2 (W) × 14-15/16 (H) × 7-15/16 (D) in.
Weight..... 3.0 kg (6 lb 10 oz)

* Measured pursuant to the Federal Trade Commissions's Trade Regulation rule on Power Output Claims for Amplifier.

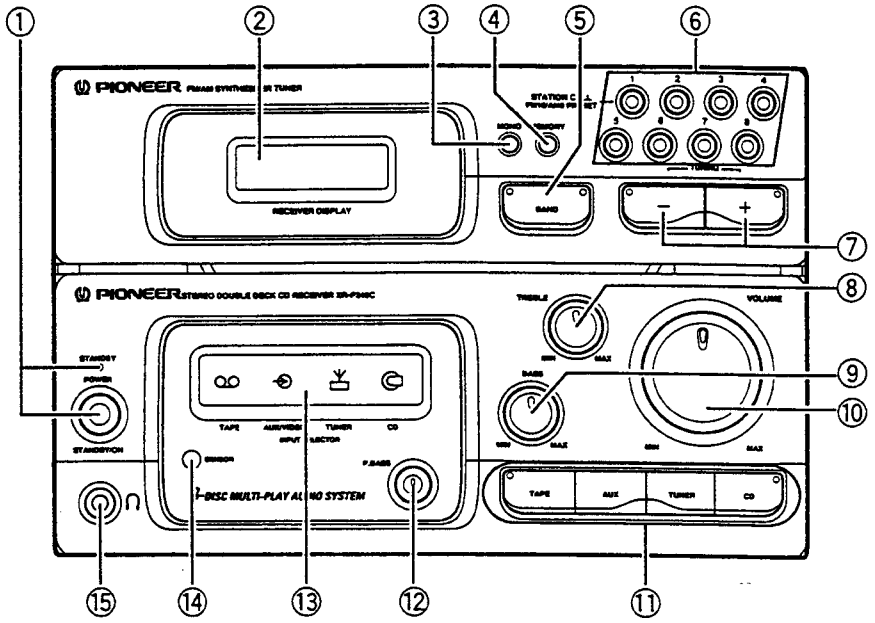
** Measured by audio spectrum analyzer.

NOTE:

Specifications and design subject to possible modifications without notice, due to improvements.

1.3 PANEL FACILITIES

RECEIVER SECTION



RECEIVER SECTION

① **POWER switch/STANDBY indicator**
This is the switch for electric power.
ON: When set to the ON position, power is supplied and the unit becomes operational.
STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

② **RECEIVER DISPLAY**

③ **MONO button**

④ **MEMORY button**

⑤ **BAND button**

⑥ **STATION CALL FM (16)/AM (8) PRESET buttons**

⑦ **TUNING –(down)/+(up) buttons**

⑧ **TREBLE control**
Use to adjust treble (high-frequency) emphasis; turn toward the MAX side to boost treble sound, and toward the MIN side to decrease treble sound.

⑨ **BASS control**
Use to adjust bass (low-frequency) emphasis; turn toward the MAX side to boost bass sound, and toward the MIN side to decrease bass sound.

⑩ **VOLUME control**

⑪ **Input selector buttons (TUNER, TAPE, CD, AUX/VIDEO)**
Select the desired function before performing other operations.

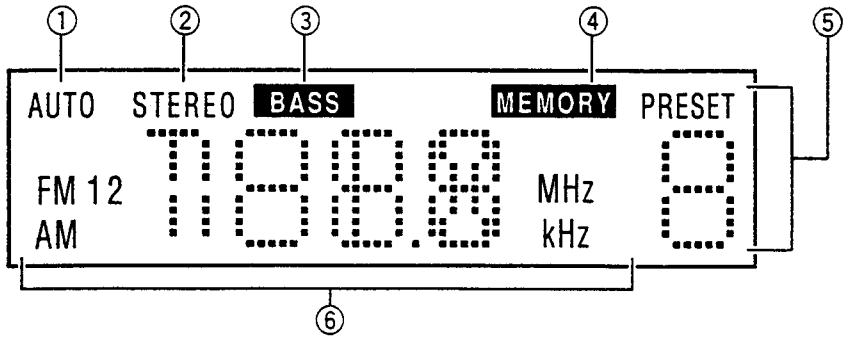
⑫ **P. BASS switch/indicator**
Set to ON to produce powerfully enhanced bass sound.

⑬ **Input selector indicators**

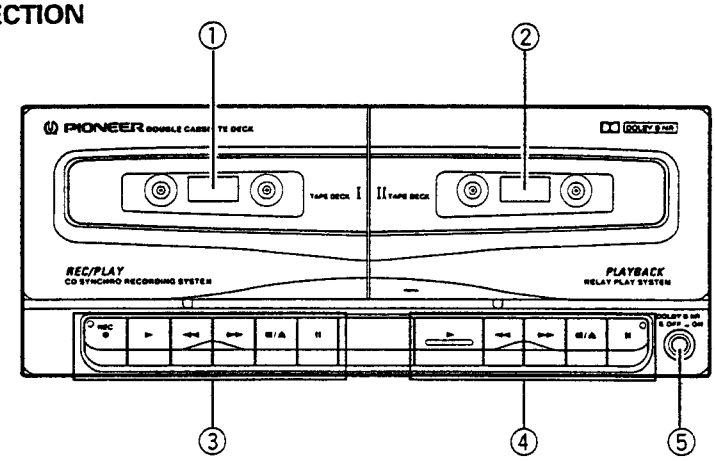
⑭ **Remote control SENSOR**

⑮ **Headphone jack (PHONES)**

RECEIVER DISPLAY



TAPE DECK SECTION



RECEIVER DISPLAY

① **AUTO indicator**
The AUTO indicator turns off in the FM MONO mode.

② **STEREO indicator**
Lights during reception of stereo broadcast.

③ **BASS indicator**
Lights when the P. BASS function is ON.

④ **MEMORY indicator**
Lights when the memory button is pressed during the manual preset operation.

⑤ **Preset number display**
When manual preset operation is used, the preset station number is displayed here.

⑥ **Frequency display**
Tuned frequency is displayed.

TAPE DECK SECTION

① **DECK I cassette door**

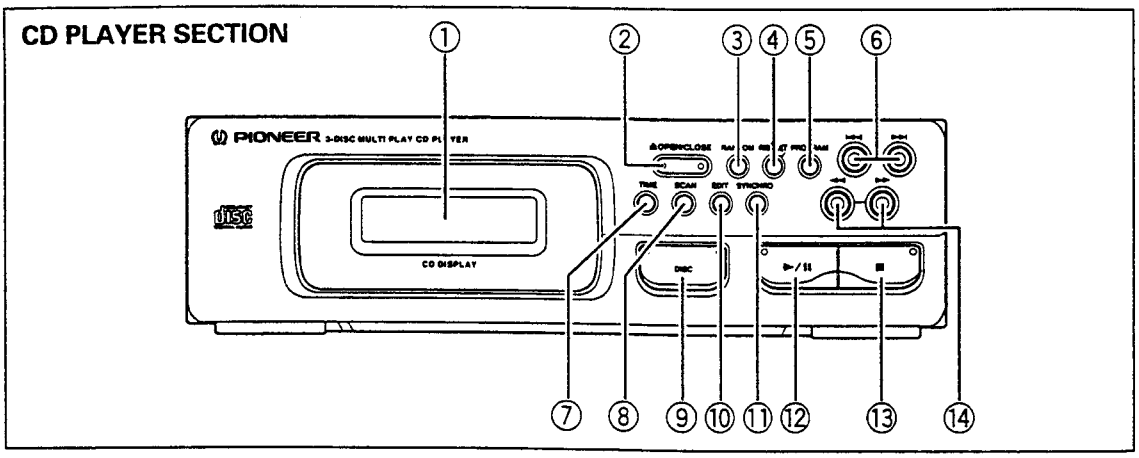
② **DECK II cassette door**

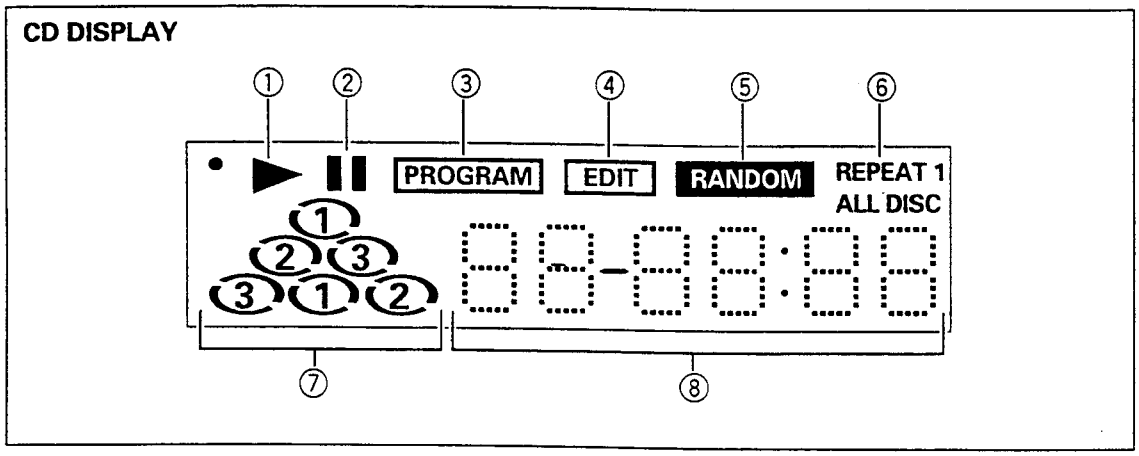
③ **DECK I operation switches (RECORD ●, Play ►, Fast ◄◄ ►►, Stop/Eject ■/≜, Pause ❚❚)**

④ **DECK II operation switches (Play ►, Fast ◄◄ ►►, Stop/Eject ■/≜, Pause ❚❚)**

⑤ **DOLBY*NR switch (▙ OFF ▁ ON) (U.S. and Canadian models only)**

*
- *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
- *"DOLBY" and the double-D symbol ◻◻ are trademarks of Dolby Laboratories Licensing Corporation.*





CD PLAYER SECTION

① **CD DISPLAY**
② **OPEN/CLOSE button (⏏)**
③ **RANDOM button**
④ **REPEAT button**
⑤ **PROGRAM button**
⑥ **Track search buttons (⏮ ⏭)**
⑦ **TIME button**
⑧ **SCAN button**
⑨ **DISC button**
⑩ **EDIT button**
⑪ **SYNCHRO button**
⑫ **Play/Pause button (►/II)**
⑬ **Stop button (■)**
⑭ **Manual search buttons (◄◄ ►►)**

CD DISPLAY

① **Play indicator (►)**
Lights when playing a CD.

② **Pause indicator (II)**
Lights during pause mode.

③ **PROGRAM indicator**
Lights during program mode.

④ **EDIT indicator**
Lights when EDIT recording is performed.

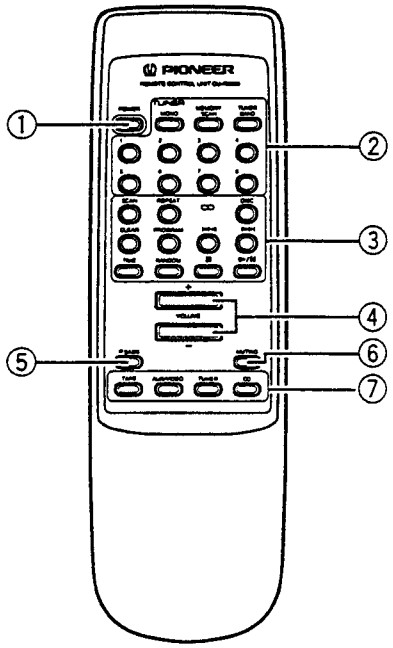
⑤ **RANDOM indicator**
Lights during random playback.

⑥ **REPEAT indicator**
Lights during repeat playback.

⑦ **Disc tray number indicator**
Lights when function is set to CD. The currently playing disc number flashes.

⑧ **Track number/time display**
Displays track number and playback time, etc.

REMOTE CONTROL UNIT



REMOTE CONTROL UNIT

① POWER button

② TUNER operation buttons

MONO: During reception of FM stereo broadcasts, use to switch between stereo and monaural reception.

MEMORY SCAN:

TUNER BAND: Use to switch between FM and AM bands.

1-8: Preset station-call buttons.

③ CD operation buttons

SCAN: Intro scan

REPEAT: Repeat playback

DISC: Disc No. selection

CLEAR: Use to erase the track program.

PROGRAM: Set to track programming mode.

⏮, ⏭: Track search

TIME: Select time display mode.

RANDOM: Random playback

■: Stop

►/II: Play/Pause

④ VOLUME –/+ button

⑤ P. BASS button

⑥ MUTING button

Press to temporarily cut off sound. Press again (or VOLUME button) to restore sound to its original volume.

⑦ Input selector buttons

(TAPE, AUX/VIDEO, TUNER, CD)

1.4 DISASSEMBLY

■ How to Remove Changer Base

To remove the changer base, unscrew 2 screws Ⓐ shown in the figure below and pull out changer base from the chassis.

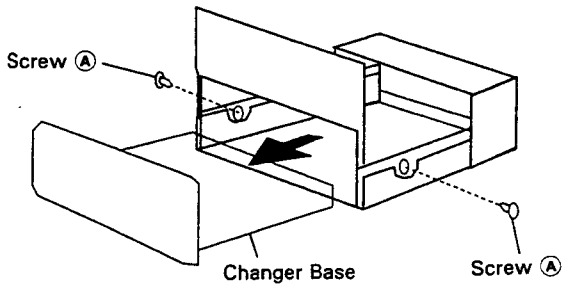


Fig. 1

■ How to Remove Turntable

1. Remove the turntable by sliding the guide plate outward.
2. Disassemble the base cover by removing the 2 screws Ⓑ.

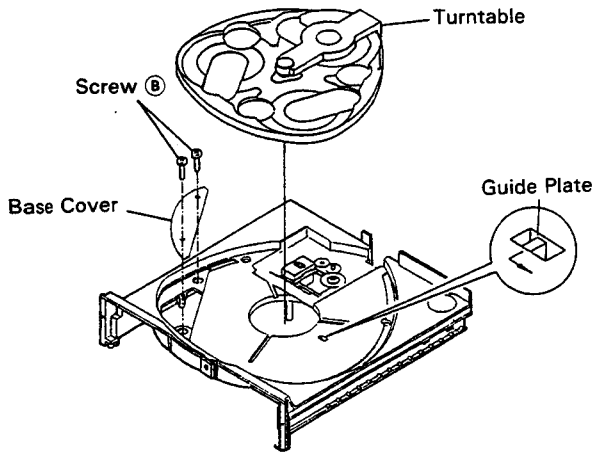


Fig. 2

After removing the turn table, remove magnetic holder from the arm assy, and use it to clamp a CD.

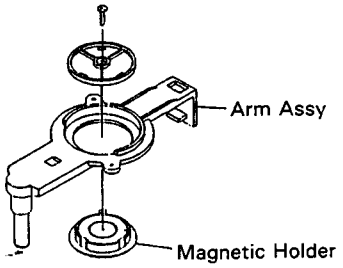
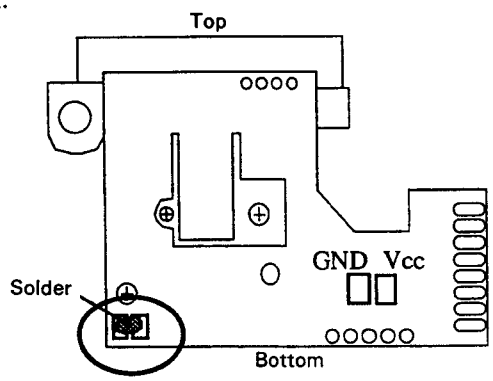


Fig. 3

■ Laser Diode Protection of the Pickup

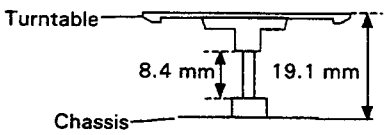
During transit, Laser diode of the pickup is protected from an electrostatic damage, by shorting Vcc and GND of the pickup assy with solder. Remove the solder after you have mounted the pickup assy to the unit.
Laser diode will not light unless this protection solder is removed.



Pickup Side View

■ Height of Spindle Motor Turntable

Spindle motor is available as CD mechanism assy, and so the height adjustment of spindle motor turntable is unnecessary. But in case of confirming the height level, refer to the following figure.

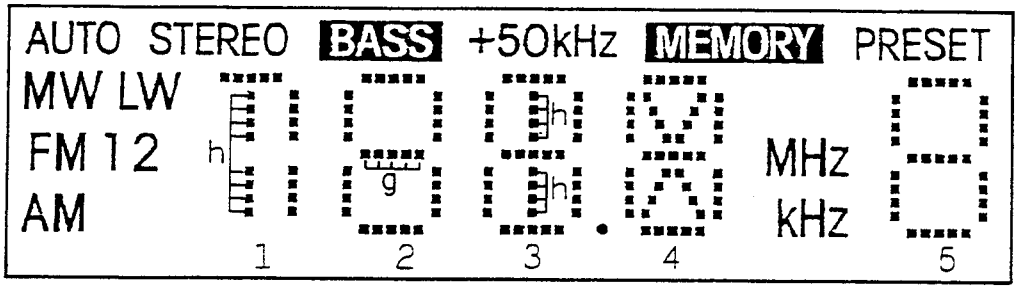


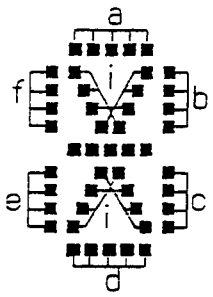
1.5 FL INFORMATION

■ AZA7090 (LCD001 : FRONT PCB ASSY)

● LCD Display

● Grid Assignment

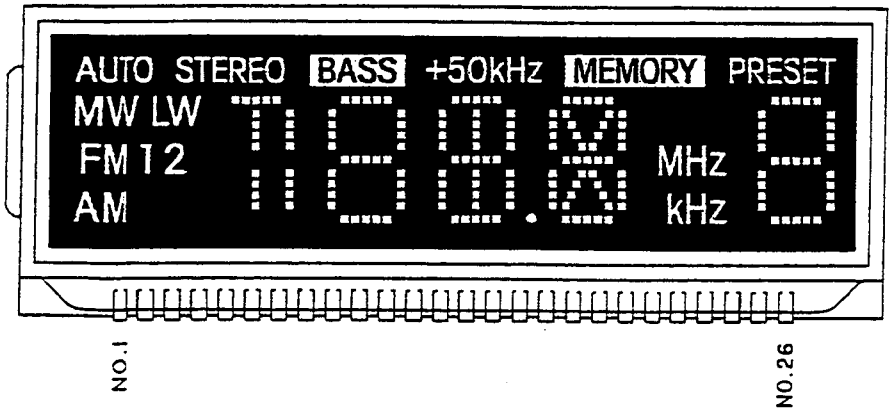




● Anode Connection

NO.	COM.1	COM.2
1	COM.1	
2		COM.2
3	MW	FM
4	AUTO	AM
5	1	LW
6	2	STEREO
7	BASS	1a
8	1h	1b.1c
9	2f	2b
10	2e	2g
11	2d	2c
12	2a	+50kHz
13	3f	3b
14	3e	3g
15	3d	3c
16	3a	3h
17	4f	4b
18	4e	4g
19	4d	4c
20	4a	4i
21	MHz	kHz
22	MEMORY	•
23	5f	5b
24	5e	5g
25	5d	5c
26	5a	PRESET

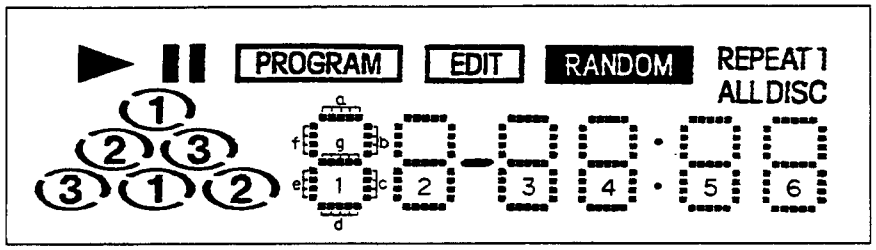
● Pin Assignment

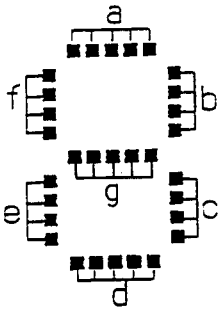


■ AZA7092 (LCD01 : CD DECODER PCB ASSY)

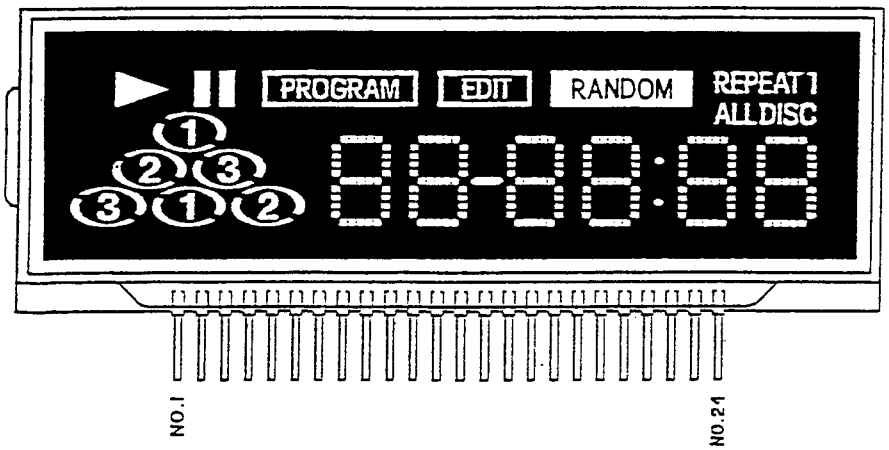
● LCD Display

● Grid Assignment





● Pin Assignment



● Anode Connection

NO.	COM.1	COM.2	COM.3
1			COM.3
2		COM.2	
3	COM.1		
4	③ under	② center	●
5	① under	③ center	① too
6	▶	② under	▮▮
7	1e	1f	
8	1d	1g	1a
9	1c	1b	PROGRAM
10	2e	2f	
11	2d	2g	2a
12	2c	2b	—
13	3e	3f	EDIT
14	3d	3g	3a
15	3c	3b	
16	4e	4f	RANDOM
17	4d	4g	4a
18	4c	4b	:
19	5e	5f	REPEAT
20	5d	5g	5a
21	5c	5b	ALL
22	6e	6f	DISC
23	6d	6g	6a
24	6c	6b	1

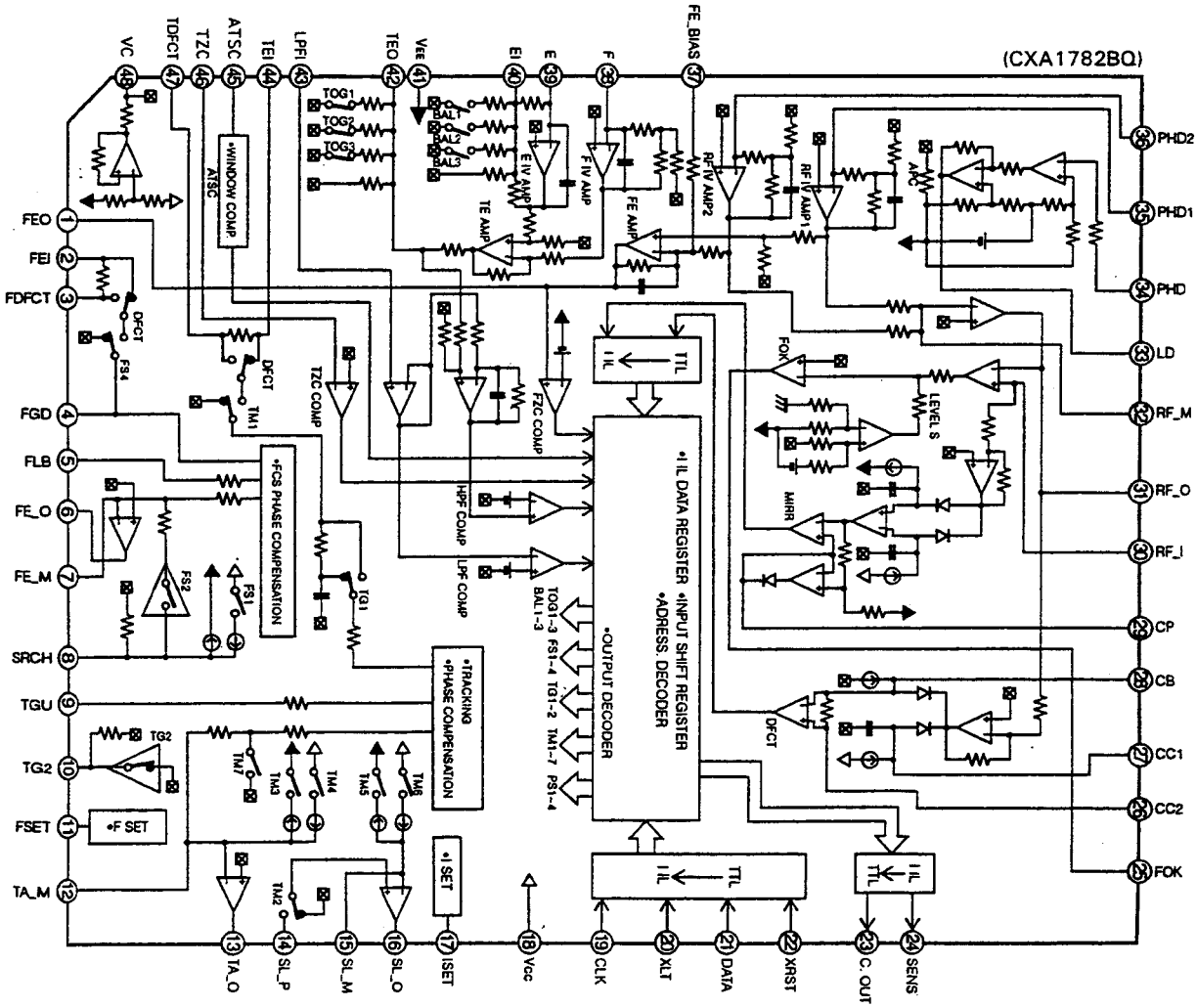
1.6 IC INFORMATION

- *The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.*

■ AZQ7016 (IC01 : CD DECODER PCB ASSY)

● RF/Servo Amplifier

● Block Diagram



● Pin Function

No.	Pin Name	I/O	Description
1	FEO	I	Focus errer amplifier output terminal, internally connected to the FZC comparator input.
2	FEI	I	Focus errer input terminal
3	FDFCT	I	Time constant capacitor connection terminal at the time of a defect.
4	FGD	I	Connect this terminal to earth via a capacitor to drop the high-range gain of the focus servo.

No.	Pin Name	I/O	Description
5	FLB	I	Time constant external connection terminal for raising of the focus servo low range.
6	FE O	O	Focus drive output
7	FE M	I	Focus amplifier reversion input terminal
8	SRCH	I	Time constant external connection terminal to produce the focus search waveform.

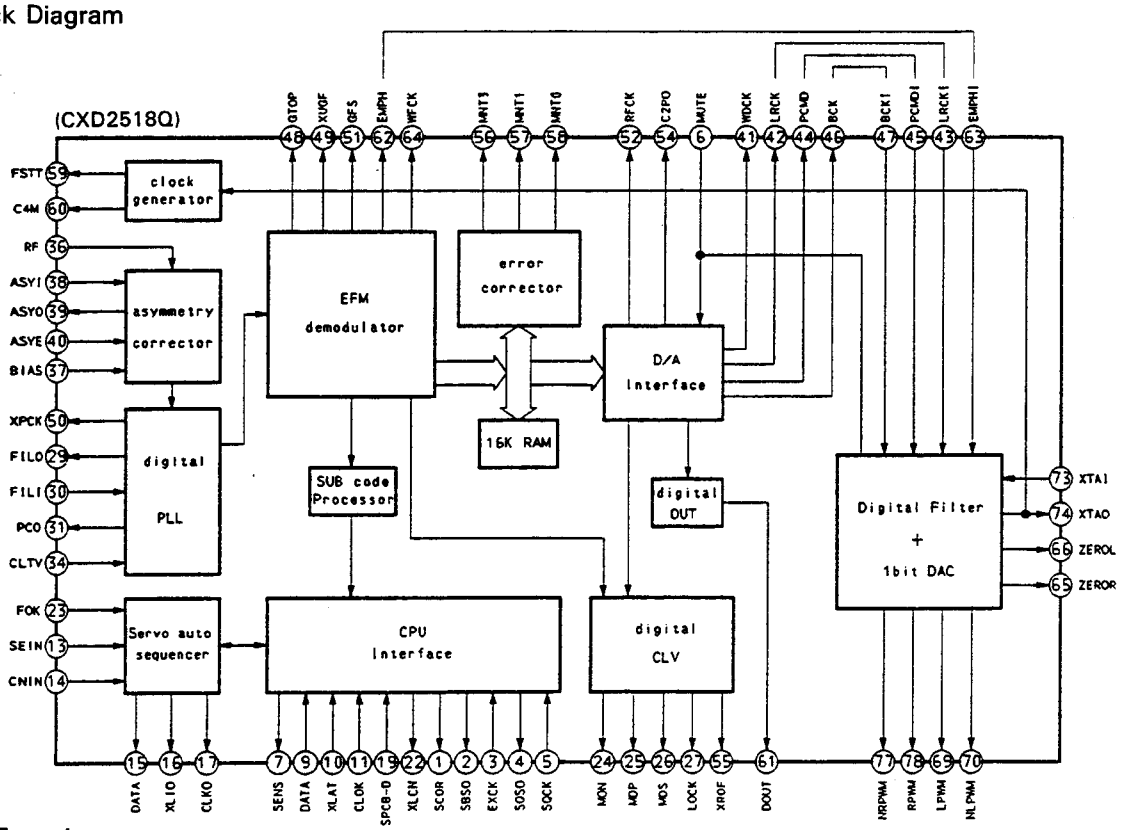
No.	Pin Name	I/O	Description
9	TGU	I	Time constant external connection terminal for tracking high-range gain switching.
10	TG2	I	
11	FSET	I	Terminal for peak setting for focus tracking phase compensation.
12	TA M	I	Tracking amplifier reversion input terminal
13	TA O	O	Tracking drive output
14	SL P	I	Sled amplifier non reversion input terminal
15	SL M	I	Sled amplifier reversion input terminal
16	SL O	O	Sled drive output
17	ISET	I	Current for decision of focus search, track jump, and sled kick height flows.
18	Vcc	–	
19	CLK	I	Serial data transmission clock input from the CPU (no pull-up resistor)
20	XLT	I	Latch input from the CPU (no pull-up resistor)
21	DATA	I	Serial data input from the CPU (no pull-up resistor)
22	XRST	I	Reset input terminal "L"=Reset (no pull-up resistor)
23	C.OUT	O	Signal output for track number count
24	SENS	O	Output of FZC, DFCT, TZC, Gain, BAL, etc. by command from the CPU.
25	FOK	O	Output terminal of the focus OK comparator
26	CC2	O	Input terminal for capacitative-coupled DEFECT bottom hold output
27	CC1	I	DEFECT bottom hold output terminal
28	CB	I	DEFECT bottom hold capacitor connection terminal
29	CP	I	MIRR hold capacitor connection terminal MIRR comparator non reversion input terminal
30	RF I	I	Input terminal for capacitative-coupled RF summing amplifier output
31	RF O	O	RF summing amplifier output terminal Eye pattern checkpoint

No.	Pin Name	I/O	Description
32	RF M	I	RF summing amplifier reversion input terminal The RF amplifier gain is decided by the resistor connected between this terminal and the RFO terminal.
33	LD	O	APC amplifier output terminal
34	PHD	I	APC amplifier input terminal
35	PHD1	I	RFI-V amplifier reversion input terminals Connected to the A+C, B+D terminals of the photodiode and receiving current input.
36	PHD2	I	
37	FE BIAS	I	Bias adjustment terminal of the focus errer amplifier.
38	F	I	F, E I-V amplifier reversion input terminals Connected to F and E of the photodiode and receiving current input.
39	E	I	
40	EI	–	Gain adjustment terminal of the I-V amplifier. (when automatic BAL adjustment is not used)
41	VEE	–	
42	TEO	O	Output terminal of the tracking error amplifier. E-F signal output
43	LPFI	I	Comparator input terminal for BAL adjustment. (input from TEO via LPF)
44	TEI	I	Tracking error input terminal
45	ATSC	I	ATSC detection window comparator input terminal
46	TZC	I	Tracking zero cross comparator input terminal.
47	TDFCT	I	Time constant capacitor connection terminal at the time of a defect.
48	VC	O	(VCC+VEE)/2 DC voltage output terminal

■ AZQ7017 (IC04 : CD DECODER PCB ASSY)

● Digital Signal Processor

● Block Diagram



● Pin Function

No.	Pin Name	I/O	Description
1	SCOR	O	"H" when subcode sync S0 or S1 has been detected
2	SBSO	O	Serial output of SUBP to W
3	EXCK	I	Clock input for SBSO readout
4	SQSO	O	Serial output of SUBQ 80 BIT
5	SQCK	I	Clock input for SQSO readout
6	MUTE	I	Mute with "H", cancellation with "L"
7	SENS	O	SENS output, output to the CPU
8	XRST	I	System reset, reset with "L"
9	DATA	I	Serial data input from the CPU
10	XLAT	I	Latch input from the CPU, serial data latching with drop
11	CLOK	I	Serial data transmission clock input from the CPU
12	Vss	–	GND

No.	Pin Name	I/O	Description
13	SEIN	I	Sensing input from SSP
14	CNIN	I	Track jump number count signal input
15	DATO	O	Serial data output to SSP
16	XLTO	O	Serial data latching output to SSP, latching with drop
17	CLKO	O	Serial data transmission clock output to SSP
18	TEST2	I	Test pin, V_{DD} at the time of normal use
19	SPOB	I	Microcomputer expansion interface (input B)
20	SPOC	I	Microcomputer expansion interface (input C)
21	SPOD	I	Microcomputer expansion interface (input D)
22	XLON	O	Microcomputer expansion interface (output)
23	FOK	I	Focus OK input pin, used for SENS output and servo autosequencer

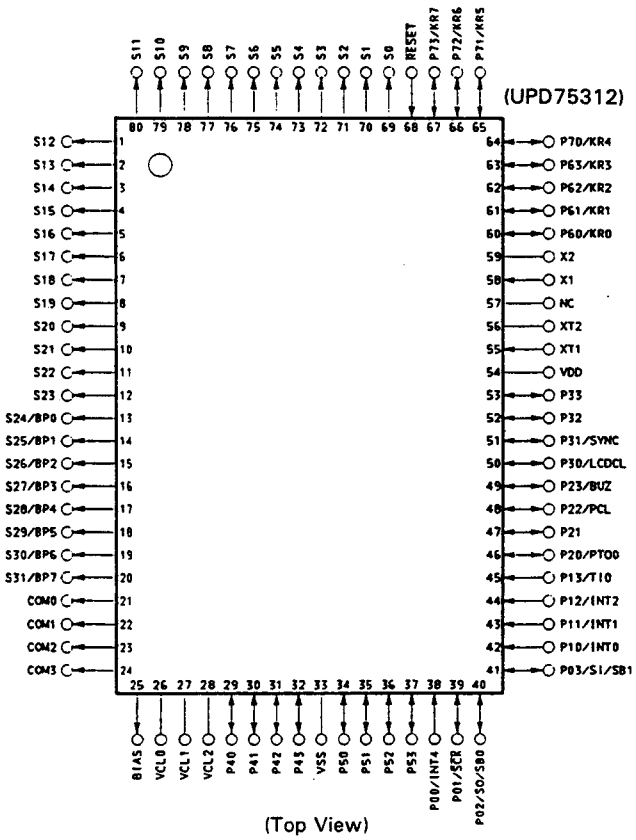
No.	Pin Name	I/O	Description
24	MON	O	Spindle motor ON/OFF control output
25	MDP	O	Spindle motor servo control
26	MDS	O	
27	LOCK	O	GFS sampling at 460 Hz, "H" output when GFS is "H", "L" output with 8 consecutive times "L"
28	TEST	I	TEST pin, GND at the time of normal use
29	FILO	O	Filter output for master PLL (slave = digital PLL)
30	FILI	I	Filter input for master PLL
31	PCO	O	Charge pump output for master PLL
32	V_{DD}	–	Digital power supply for DSP
33	AV_{SS1}	–	Analog GND for DSP
34	CLTV	I	VCO control voltage input for master PLL
35	AV_{DD1}	–	Analog power supply for DSP
36	RF	I	EFM signal input
37	BIAS	I	Asymmetry compensation circuit constant current input
38	ASYI	I	Asymmetry compensation circuit comparation voltage input
39	ASYO	O	EFM full swing output ("L" = V_{SS}, "H" = V_{DD})
40	ASYE	I	"L": Asymmetry compensation OFF, "H": Asymmetry compensation ON
41	WDCK	O	48 bit slot D/A interface, read clock (2FS)
42	LRCK	O	48 bit slot D/A interface, LR clock (FS)
43	LRCKI	I	LR clock input to DAC (48 bit slot)
44	PCMD	O	D/A interface, serial data (2'SCOMP, MSB first)
45	PCMDI	I	Audio data input to DAC (48 bit slot)
46	BCK	O	D/A interface, bit clock
47	BCKI	I	Bit clock input to DAC (48 bit slot)
48	GTOP	O	GTOP output
49	XUGF	O	XUGF output
50	XPCK	O	XPLCK output
51	GFS	O	GFS output
52	RFCK	O	RFCK output

No.	Pin Name	I/O	Description
53	V_{SS}	–	GND
54	C2PO	O	C2PO output
55	XROF	O	XRAOF output
56	MNT3	O	MNT3 output
57	MNT1	O	MNT1 output
58	MNT0	O	MNT0 output
59	FSTT	O	2/3 frequency division output of the pins 73 and 74
60	C4M	O	4.2336 MHz output
61	DOUT	O	Digital Out output terminal
62	EMPH	O	"H" with emphasis for the playback disc, "L" with no emphasis
63	EMPHI	I	DAC deemphasis ON/OFF, ON with "H", OFF with "L"
64	WFCK	O	WFCK (WRITE FRAME CLOCK) output
65	ZEROL	O	No sound data detection output, "H" with no sound data detection (Lch)
66	ZEROR	O	No sound data detection output, "H" with no sound data detection (Rch)
67	DTSI	I	DAC test terminal 1, normally "L"
68	V_{DD}	–	DAC digital power supply
69	LPWM	O	Lch PWM output (normal phase)
70	NLPWM	O	Lch PWM output (reverse phase)
71	AV_{DD2}	–	Power supply for Lch PWM driver
72	AV_{DD3}	–	Power supply for Xtal
73	XTAI	I	Xtal oscillation circuit input for 33.8688 MHz
74	XTAO	O	Xtal oscillation circuit output for 33.8688 MHz
75	AV_{SS3}	–	GND for Xtal
76	AV_{SS2}	–	GND for PWM driver
77	NRPWM	O	Rch PWM output (reverse phase)
78	RPWM	O	Rch PWM output (normal phase)
79	DTS2	I	Test terminal 2 for DAC, normally "L"
80	DTS3	I	Test terminal 3 for DAC, normally "L"

■ AZQ7018 (IC03 : CD DECODER PCB ASSY)

● Microcomputer

● Pin Assignment



(Top View)

● Pin Function

No.	Pin Name	Pin Function	I/O	Description
1 | 12	S12 | S23	S12 | S23	O	Segment output
13 | 16	BP0 | BP3	KS1 | KS4	O	Key scan output 1 | Key scan output4
17	BP4	EMPHAS	O	AUDIO circuit emphasis control
18	BP5	MUTG	O	DSP muting signal output
19	BP6	SYNC2	O	Output 1 for synchronized recording
20	BP7	SYNC2	O	Output 2 for synchronized recording
21 | 23	COM0 | COM3	COM0 | COM3	O	Common signal output terminal

No.	Pin Name	Pin Function	I/O	Description
24	COM3	COM3	O	Not used
25	BIAS	–	O	Output terminal for external splitting resistor cut
26	VCL0	–	I	Power supply terminal for LCD drive
27	VCL1	–	I	Not used
28	VCL2	–	I	
29	P40	CLOSE	I	Tray CLOSE SW
30	P41	OPEN	I	Tray OPEN SW
31	P42	SENSE1	I	Turntable position detection switch
32	P43	DISC	I	Disc detection photocoupler
33	VSS	–	–	GND
34	P50	LDG OP	O	Loading motor drive output (OPEN)
35	P51	LDG CL	O	Loading motor drive output (CLOSE)
36	P52	MOVE1	O	Turntable motor output 1
37	P53	MOVE2	O	Turntable motor output 2
38	INT4	GFS	I	Frame synchronous signal lock state
39	SCK	SQCK	O	CXD2518 SQCK
40	SO	SO	O	Not used
41	SI	SI	I	CXD2518 SUBQ
42	INTO	Q–IN	I	CXD2518 SCOR
43	INT1	REMOKN	I	Remote control sensor unit connection
44	INT2	SENSE	I	Servo status output signal
45	P13	FOK	I	Focus OK detection signal
46	P20	MUTE	O	AUDIO circuit muting control
47	P21	LDON	O	Laser output
48	P22	–	–	Not used
49	P23	–	–	

No.	Pin Name	Pin Function	I/O	Description
50	P30	RESUME	I	RESUME operation judgement terminal
51	P31	A. PLAY	I	Automatic play function after power ON YES/NO judgement terminal
52	P32	C. OUT	I	C. OUT
53	P33	A. A/M	I	Automatic adjustment YES/NO judgement terminal
54	VDD	–	–	——
55	XTI	A. MODE	I	Judgement terminal for automatic adjustment after power ON/for each disc change
56	XT2	–	–	——
57	NC	–	–	——
58	X1	–	–	Connection terminal of crystal oscillator for main system clock
59	X2	–	–	

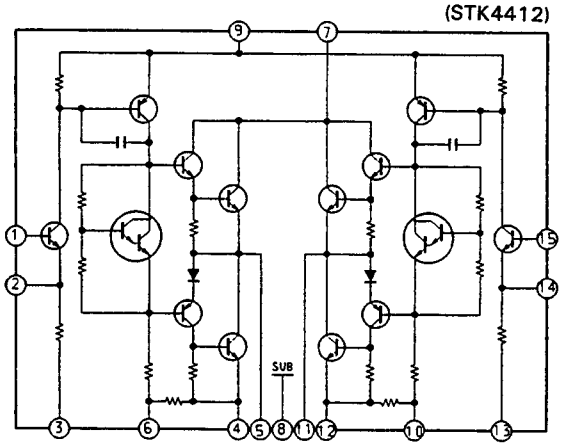
No.	Pin Name	Pin Function	I/O	Description
60 | 64	P60 | P63	KR1 | KR4	I	Key scan input signal 1 | Key scan input signal 4
64	P70	DATA	O	CXD2518 DATA
65	P71	CLK	O	CXD2518 CLK
66	P72	XLT	O	CXD2518 XLT
67	P73	XRST	O	CXD2518 XRST
68	RESET	RESET	I	μ-com. reset signal input terminal
69 | 80	S0 | S11	S0 | S11	O	Segment output

■ AZQ7009 (IC401 : MAIN PCB ASSY)

● AF Power Amplifier

● Block Diagram

(STK4412)

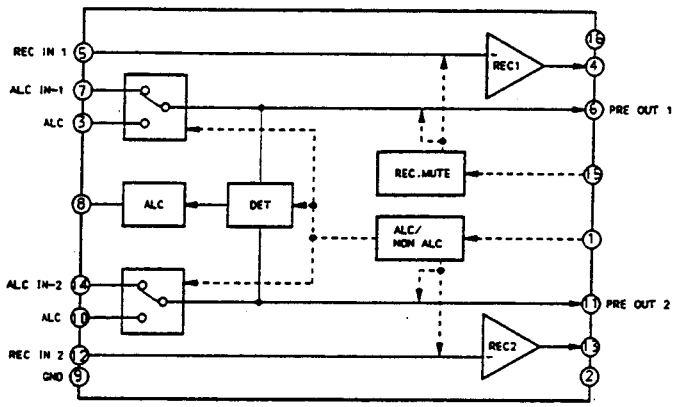


■ AZQ7010 (IC602 : MAIN PCB ASSY)

● **Dual Recording Pre-amp. with ALC**

● Block Diagram

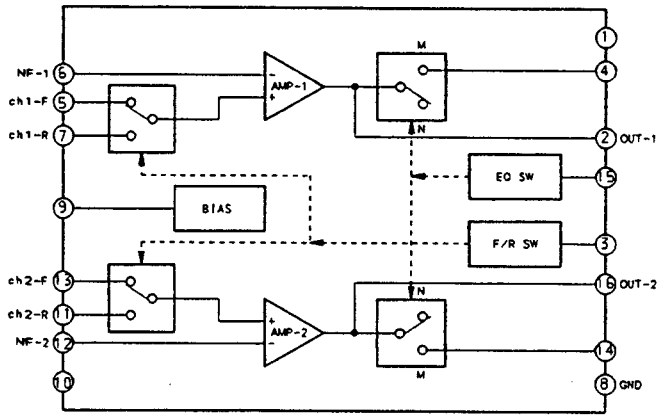
(TA8135P)



■ TA7784P (IC601 : MAIN PCB ASSY)

● **Dual Pre-amp. for Autoreverse**

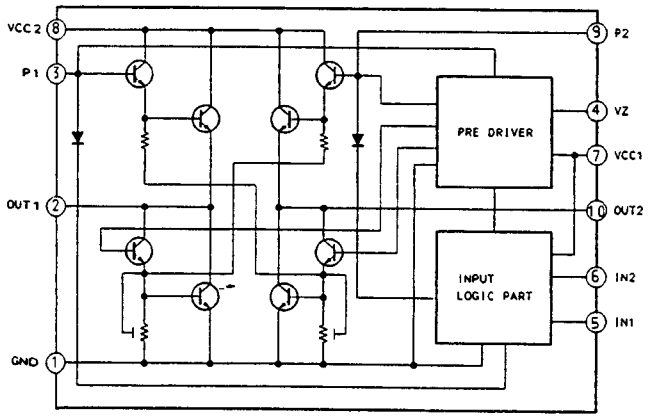
● Block Diagram



■ AZQ7014 (IC252 : FRONT PCB ASSY)

● **Motor Driver**

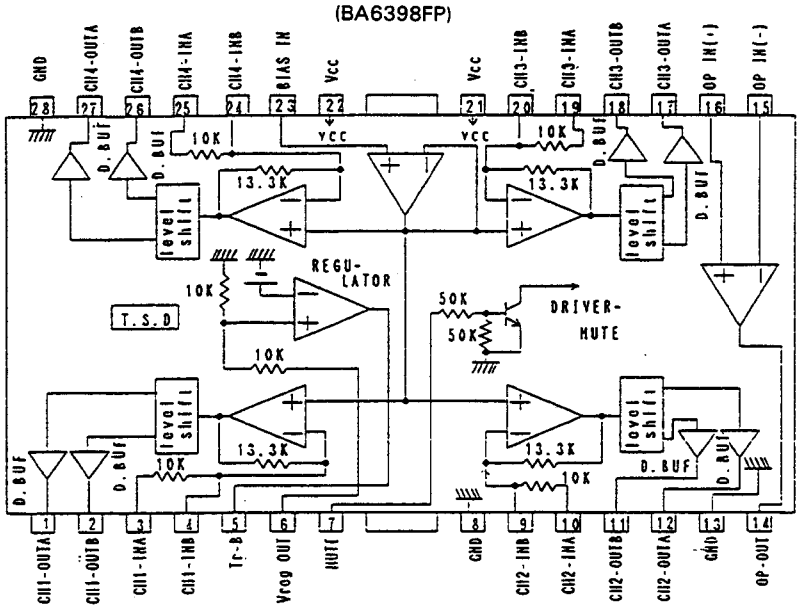
● Block Diagram



■ AZQ7019 (IC05 : CD DECODER PCB ASSY)

● 4ch BTL Driver

● Block Diagram



● Pin Function

No.	Pin Name	Description
1	CH1−OUT A	Inverted output of CH1
2	CH1−OUT B	Non inverted output of CH1
3	CH1−IN A	Input for CH1
4	CH1−IN B	Gain adjustment of CH1
5	Tr−B	Connection with BASE of PNP Tr
6	Vreg OUT	Output for regulator (5V) (*1)
7	MUTE	Mute Control
8	GND	Ground
9	CH2−IN B	Gain adjustment of CH2
10	CH2−IN A	Input for CH2
11	CH2−OUT B	Non inverted output of CH2
12	CH2−OUT A	Inverted output of CH2
13	GND	Substrate Ground
14	OP OUT	Output for OP-amp

No.	Pin Name	Description
15	OP IN (−)	Inverting input for OP-amp
16	OP IN (+)	Non inverting input for OP-amp
17	CH3−OUT A	Non inverted output of CH3
18	CH3−OUT B	Inverted output of CH3
19	CH3−IN A	Input for CH3
20	CH3−IN B	Gain adjustment of CH3
21	Vcc	Vcc
22		
23	BIAS IN	Input for reference voltage
24	CH4−IN B	Gain adjustment of CH4
25	CH4−IN A	Input for CH4
26	CH4−OUT B	Non inverted output of CH4
27	CH4−OUT A	Inverted output of CH4
28	GND	Substrate Ground

**1. Connect collector of external PNP Tr.*

1.7 ADJUSTMENTS

(1). TUNER SECTION

(1)−1. FM TUNER SECTION

FM Range Adjustment

1. FM RF signal generator input through JK101 FM antenna IN. (See Fig. 1)
2. Digital DC voltage meter connected to TP1 and TP2.
3. Tuning to 87.5 MHz, adjust L103 for a counter reading of 1.20V ±0.05V.
4. Tuning to 108.0 MHz, check the reading should be 8.5V ±0.5V.
5. Repeat adjustments as necessary to minimize tracking error.

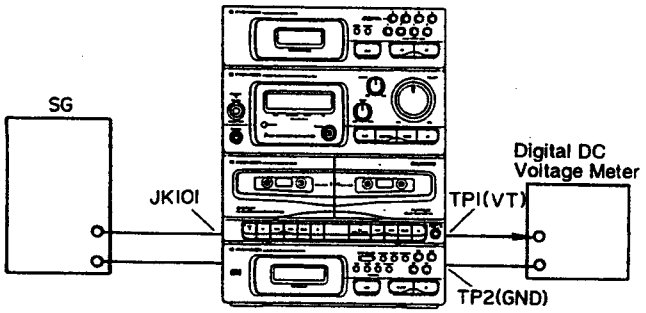


Fig. 1

FM IF Alignment Procedure

Adjust : T101, T104

1. Connect 0.022μF capacitor to IF sweep generator output and JK101 FM antenna IN. (See Fig. 2)
2. Output waveform from the oscilloscope connected to TP3 and TP4. (See Fig. 2)
3. Adjust T101 and T104 for maximum output. (See Fig. 3)

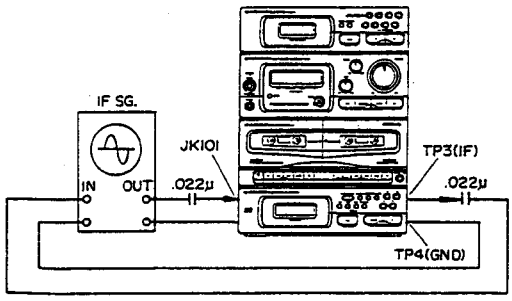


Fig. 2

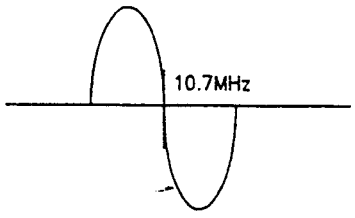


Fig. 3

FM Sensitivity Adjustment

1. FM RF signal generator input through JK101 FM antenna IN. (See Fig. 1)
2. Oscilloscope connected to speaker terminal (pins 3 and 4 of JK401).
3. Tuning to 90.1 MHz, turn VR101 clockwise to 2/3 of the maximum position and adjust L102 for maximum output.
4. Tuning to 106.1 MHz, turn VR101 clockwise to 2/3 of the maximum position and adjust TC101 for maximum output.
5. Repeat adjustments as necessary to minimize tracking error.

FM 76 kHz Alignment

1. Connect FM signal generator to FM EXT. antenna terminal.
2. Tuning to 98.1 MHz.
3. Connect a frequency counter as shown in Fig. 4.
4. Set FM mode key to FM auto, and FM MOD. to OFF.
5. Adjust VR101 for a frequency counter of reading of 76 kHz ±200Hz.

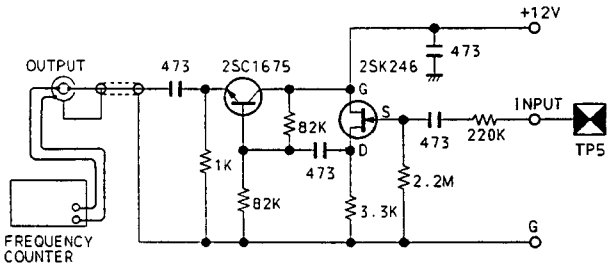


Fig. 4

(1)−2. AM TUNER SECTION

AM Range Adjustment

- Position the channel step switch on the rear panel to 9 kHz position.

1. AM RF signal generator output from loop antenna, and input through JK101 AM antenna IN. (See Fig. 1)
2. Digital DC voltage meter connected to TP1 and TP2.
3. Tuning to 531 kHz, adjust T102 for a counter reading of 0.8V ±0.05V.
4. Tuning to 1602 kHz, adjust TC103 for a counter reading of 6.1V ±0.05V.
5. Repeat adjustments as necessary to minimize tracking error.

AM IF Alignment Procedure

Adjust : T103

1. Connect 0.022μF capacitor to IF sweep generator output and JK101 AM antenna IN. (See Fig. 2)
2. Output waveform from the oscilloscope connected to TP3 and TP4. (See Fig. 2)
3. Adjust T103 for maximum output. (See Fig. 5)

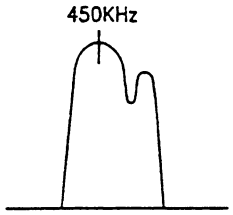


Fig. 5

AM Sensitivity Adjustment

- Position the channel step switch on the rear panel to 9 kHz position.

1. Tuning to 603 kHz, adjust L104 for maximum output.
2. Tuning to 1395 kHz, adjust TC102 for maximum output.
3. Repeat adjustments as necessary to minimize tracking error.

(2). CASSETTE DECK SECTION

Cassette Speed Adjustment

1. Insert test tape STD−301E into deck II (play deck), in normal dubbing mode.
2. Connect a frequency counter to speaker terminal (pins 3 and 4 of JK401).
3. Adjust VR609 for a frequency counter reading of 3150Hz ±2%.

Head Azimuth Adjustment

1. Insert test tape STD−331E into deck I, in play mode.
2. AC milli-volt meter connected to speaker terminal (pins 3 and 4 of JK401).
3. Adjust the left side screw for maximum output. (See Fig. 6)
4. Insert test tape STD−331E into deck II, in play mode.
5. Adjust the left side screw for maximum output. (See Fig. 7)

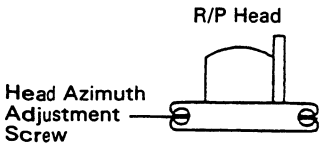


Fig. 6

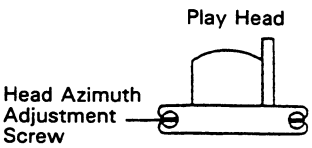


Fig. 7

Oscillator Frequency Adjustment

1. Frequency counter connected to TP609 and GND.
2. Insert test tape STD−631 into deck I, in record mode.
3. Adjust L604 let counter reading as 108 kHz ±200Hz.

Bias Adjustment

1. Insert test tape STD−631 into deck I, in record mode.
2. AC milli-volt meter connected to TP602 and TP604 (−).
3. Adjust VR608 (R), let AC milli-volt meter indicated as 3.8 mV.
4. AC milli-volt meter connected to TP601.
5. Adjust VR607 (L), let AC milli-volt meter indicated as 3.8 mV.

Trap Adjustment

1. Insert test tape STD−631 into deck I, in record mode.
2. Scope connected to TP606 (R) and TP605 (L).
3. Adjust L6032 (R), let output to minimum.
4. Adjust L6031 (L), let output to minimum.

(3). CD SECTION

1. Playback the test disc (YEDS−7).
2. Adjust VR01 so that the output of Test point "CN15" becomes at maximum. (See Fig. 8)
   Output Level: 0.8V±0.2V

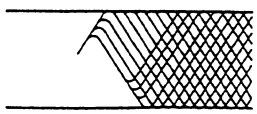
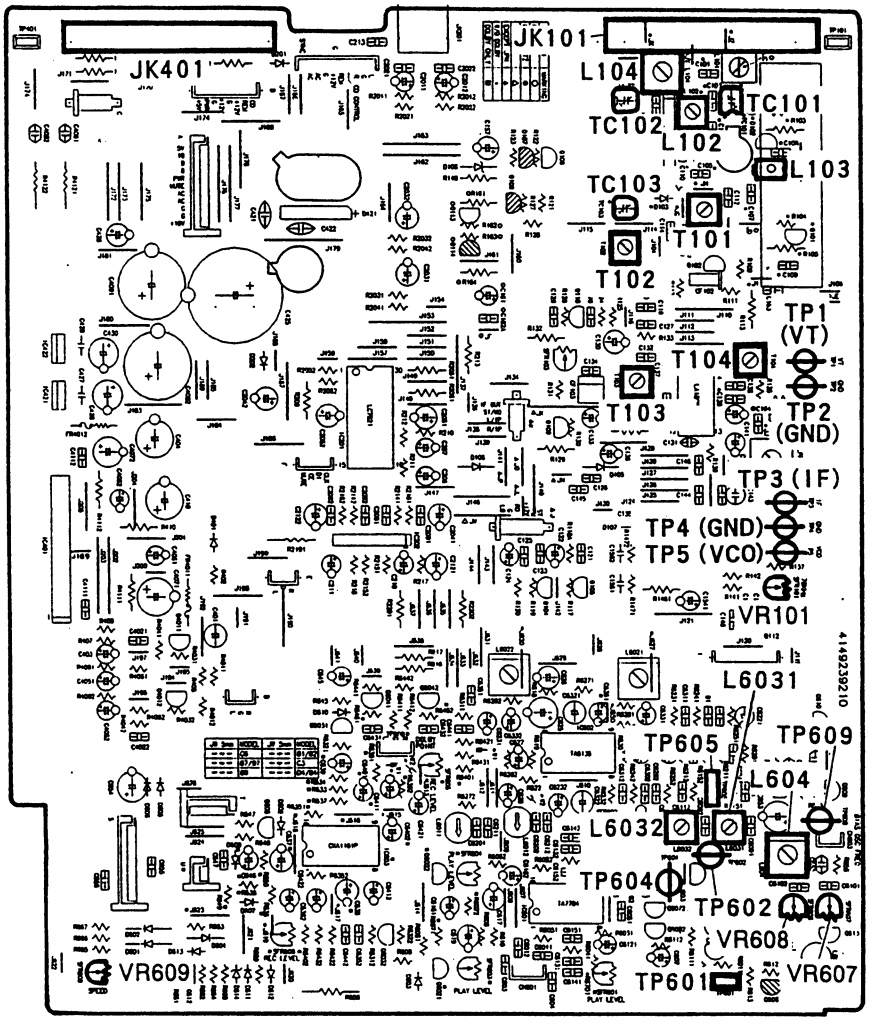


Fig. 8

MAIN PCB ASSY



CD DECODER PCB ASSY

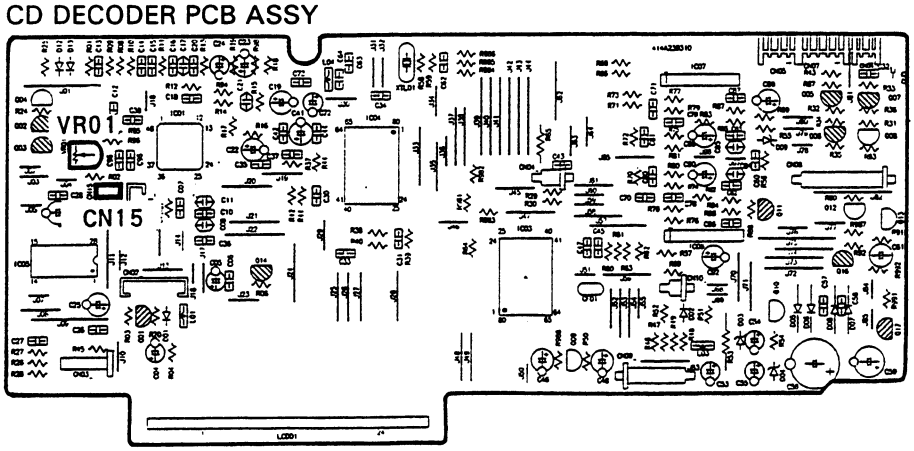


Fig. 9 Adjustment and Measurement Points

1.8 PARTS LIST FOR PACKING AND EXPLODED VIEWS

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Mark

(1). PACKING

Mark	No.	Description	Parts No.
	1	FM LINE ANT	AZE1070
	2	AM LOOP ANT COIL	AZE7020
	3	SNOW BOX (R)	AZH7020
	4	SNOW BOX (L)	AZH7021
	5	MASTER CARTON	AZH7022
	6	SOFT SHEET (750×1300)	AZH7027
	7	.....	
	8	.....	
	9	OPERATING INSTRUCTIONS (English)	AZR7007
	10	REMOTE CONTROL UNIT	AZW7084
	11	BATTERY COVER	AZN7172
NSP	12	BATTERY (R6P, AA)	AEX−010

(2). EXTERIOR

Mark	No.	Description	Parts No.
	1	SCREW (STEEL)	ABA1093
⚠	2	FUSE (T1A/250V, FU501)	AEK−508
⚠	3	FUSE (T2.5A/250V, FU503)	AEK−512
⚠	4	FUSE (T3.15A/250V, FU502)	AEK−513
	5	CD WINDOW	AZA7051
	6	TUNING WINDOW	AZA7052
	7	FUNCTION WINDOW	AZA7053
	8	POWER WINDOW	AZA7054
	9	CASS. WINDOW L	AZA7055
	10	CASS. WINDOW R	AZA7056
	11	CD CONTROL KNOB	AZA7057
	12	DISCO KNOB	AZA7058
	13	VOLUME KNOB	AZA7059
	14	TREBLE/BASS KNOB	AZA7060
	15	POWER KNOB	AZA7061
	16	P. BASS KNOB	AZA7062
	17	FUNCTION KNOB	AZA7063
	18	TUNING KNOB	AZA7064
	19	POWER LENS	AZA7065
	20	VOLUME LENS	AZA7066
	21	P. BASS LENS	AZA7067
	22	E RING 2.5Q	AZB7007
	23	WASHER	AZB7010
	24	E RING 8Q	AZB7011
	25	POLY WASHER	AZB7012
	26	CLUTCH SPRING	AZB7016
⚠	27	FUSE (T3A/250V, FU504)	AZE7022
	28	DOOR SPRING	AZB7018
	29	SPRING TR. (B)	AZB7019
	30	5P CON. ASS'Y BLK 400	AZD7002
	31	3P CON. ASS'Y BRN 300	AZD7003
	32	2P CON. ASS'Y GRY 400	AZD7004
	33	5P CON. ASS'Y 350M/M	AZD7006
	34	2P CON. ASS'Y 200M/M	AZD7007
	35	4P CON. ASS'Y 300/200	AZD7008
	36	3P CON. ASSY 200M/M 0	AZD7017
	37	8P CON. ASS'Y 400M/M	AZD7024
⚠	38	AC CORD BS 6.5 BLK2	AZD7019
	39	CORD BUSHING 2104	AZE7002
	40	EARTH TER ASSY BLK−1	AZK7046
	41	SW PIN	AZN7008
	42	MAIN BASE COVER	AZN7009
⚠	43	GEAR DAMPER	AZN7179
	44	PULLEY (SIDE)	AZN7030
	45	GUIDE PLATE	AZN7041

Mark	No.	Description	Parts No.
	46	CD MECHANISM ASSY	AZN7052
	47	MOTOR PULLEY	AZN7053
	48	WHEEL	AZN7057
	49	BELT (60*1.6)	AZN7059
	50	MAG. COVER	AZN7063
	51	TRANSIT LOCK	AZN7103
	52	CASS. PLATE (L)	AZN7104
	53	CASS. PLATE (R)	AZN7105
	54	SIDE RAIL (R)	AZN7106
	55	SIDE RAIL (L)	AZN7107
	56	GUIDE PIN PLATE	AZN7108
	57	FOOT RUBBER	AZN7109
	58	POWER PCB BRACKET	AZN7110
	59	CD ESCUTCHEON	AZN7111
	60	CHANGER BASE	AZN7112
	61	TURNTABLE	AZN7113
	62	MAGNETIC (30*18*5)	AZN7114
	63	MAG. HOLDER	AZN7115
	64	SHAFT (LEVER SW)	AZN7116
	65	LEVER PLATE	AZN7117
	66	.....	
	67	CAM GEAR	AZN7119
	68	CD PCB COVER	AZN7120
	69	SW BOX	AZN7121
	70	WIRE HOLDER	AZN7122
	71	GEAR WHEEL	AZN7123
	72	MOTOR BRK.	AZN7124
	73	CUSHION HOLDER	AZN7125
	74	FRONT ESCUTCHEON	AZN7126
	75	CASS. DOOR (L)	AZN7127
	76	CASS. DOOR (R)	AZN7128
	77	PRESET BUTTON	AZN7129
	78	REC BUTTON	AZN7130
	79	PLAY BUTTON (A)	AZN7131
	80	REW BUTTON	AZN7132
	81	F. F. BUTTON	AZN7133
	82	STOP/EJ BUTTON	AZN7134
	83	PAUSE BUTTON (A)	AZN7135
	84	PLAY BUTTON (B)	AZN7136
	85	PAUSE BUTTON (B)	AZN7137
	86	MIRROR	AZN7170
	87	FUNCTION LED HOLDER	AZN7139
	88	ESCUTCHEON HOLDER	AZN7140
	89	PHONE JACK HOLDER	AZN7141
	90	HEAT SINK BRACKET	AZN7142
	91	TOP COVER	AZN7169
	92	LEAF SW LSC−1223−31	AZS7001
	93	.....	
	94	LEAF SW MLS−1	AZS7003
⚠	95	POWER TRANS. EI−66	AZT7014

Mark	No.	Description	Parts No.
	96	PWR. SUPPLY PCB ASSY	AZW7061
	97	CASS. DECK ASSY	AZW7062
	98	ARM ASSY	AZW7063
	99	MOUNTING PLATE ASSY	AZW7064
	100	VOL. IND. PCB ASSY	AZW7065
	101	R/P SW PCB ASSY	AZW7066
	102	CONNECTOR PCB ASSY	AZW7067
	103	CD SENSOR PCB ASSY	AZW7068
	104	CD LAMP PCB ASSY	AZW7069
	105	MAIN PCB ASSY	AZW7070
	106	FRONT PCB ASSY	AZW7071
	107	H/P PCB ASSY	AZW7072
	108	M. VR PCB ASSY	AZW7073
	109	CD DECODER PCB ASSY	AZW7074
	110	CD CONTROL PCB ASSY	AZW7075
	111	SHIELD PAPER	AZN7180
	112	EARTH TER+1P TER	AZK7089
	113	DRAWER MOTOR MEN−7E9	AZX7002
	114	T.T−MOTOR MMN−6E9D1	AZX7003
	115	SCREW	IBZ20P050FMC
	116	SCREW	BBZ26P030FMC
	117	SCREW	BBZ26P040FMC
	118	.....	
	119	SCREW	BBZ26P080FZK
	120	SCREW	BBZ30P060FMC
	121	SCREW	BBZ30P060FZK
	122	SCREW	BBZ30P080FMC
	123	SCREW	BBZ30P100FMC
	124	SCREW	BBZ30P120FMC
	125	SCREW	CBZ30P080FZK
	126	SCREW	IBZ26P060FMC
	127	SCREW	IBZ30P080FMC
	128	SCREW	IBZ30P080FZK
	129	SCREW	PBZ20P050FMC
	130	NUT	NK90FUC
	131	WASHER	WA92F140U050
	132	SCREW	BBZ26P060FZK
	133	CUSHION	AZN7185
	134	BINDER	AEC−093
	135	EARTH TERMINAL	AZK7012
NSP	150	BOTTOM CHASSIS	.....
NSP	151	LOCK SHEET	.....
NSP	152	MAIN PCB BRACKET	.....
NSP	153	REAR PANEL	.....

(3). CASS. DECK ASSY

Mark	No.	Description	Parts No.
	1	BASE ASSEMBLY	AZN1641
	2	CONTROL SPRING	AZN1642
	3	PAUSE LEVER	AZN1643
	4	PAUSE LEVER SPRING	AZN1644
	5	PAUSE STOPPER	AZN1645
	6	BUTTON LEVER SPRING (A)	AZN1646
	7	ACTUATOR SPRING	AZN1647
	8	PS LEVER SPRING	AZN1648
	9	REC BUTTON LEVER SPRING	AZN1649
	10	BUTTON LEVER SPRING (B)	AZN1650
	11	HEAD BASE	AZN1651
	12	HEAD BASE	AZN1652
	13	PANEL P SPRING	AZN1653
	14	CONTROL SPRING	AZN1654
	15	SPRING	AZN1655
	16	AZIMUTH SPRING	AZN1656
	17	PINCH ROLLER ARM ASSEMBLY	AZN1657
	18	SENSING LEVER	AZN1672
	19	RF CLUTCH ASSEMBLY	AZN1658
	20	RF BELT	AZN1659
	21	FLYWHEEL ASSEMBLY	AZN1660
	22	FLYWHEEL ASSEMBLY	AZN1661
	23	GEAR PLATE SPRING	AZN1662
	24	CAM GEAR	AZN1663
	25	FF GEAR	AZN1664
	26	BACK TENSION SPRING	AZN1665
	27	SUPPLY REEL ASSEMBLY	AZN1666
	28	TAKE-UP REEL ASSEMBLY	AZN1667
	29	MOTOR RUBBER	AZN1668
	30	MOTOR PULLEY	AZN1669
	31	MAIN BELT	AZN1670
	32	ANTI VIBRATION FELT MAT	AZN1671
	33	EJECT SLIDE LEVER	AZN1677
	34	PACK SPRING	AZN1673
	35	RECORD SAFETY LEVER	AZN1674
	36	KICK LEVER (B)	AZN1679
	37	KICK LEVER SPRING	AZN1676
	38	LEAF SWITCH	AZS1068
	39	MOTOR	AZX1033
	40	P HEAD	AZP1028
	41	R/P HEAD	AZP1029
	42	E HEAD	AZP1030
	43	SCREW	AZB1215
	44	SCREW	AZB1216
	45	SCREW	AZB1217
	46	SCREW	AZB1218
	47	SCREW	AZB1219
	48	SCREW	AZB1220
	49	SCREW	AZB1221
	50	SCREW	AZB1222
	51	SCREW	AZB1223
	52	WASHER	AZB1224
	53	WASHER	AZB1225
	54	WASHER	AZB1226
	55	E RING	AZB1227
	56	SCREW	AZB1228
	57	SCREW	AZB1229
	58	LEAF SW	AZS7002
	59	BUTTOM FRAME ASSY	AZN7101
	60	BUTTOM FRAME ASSY	AZN7102
	61	SCREW	AZB7020
NSP	101	SWITCH ACTUATOR	.....
NSP	102	PUSH BUTTON ACTUATOR	.....
NSP	103	REC BUTTON LEVER	.....
NSP	104	PLAY BUTTON LEVER	.....
NSP	105	REW BUTTON LEVER	.....
NSP	106	FF BUTTON LEVER	.....
NSP	107	STOP BUTTON LEVER	.....
NSP	108	PAUSE BUTTON LEVER	.....
NSP	109	CHASSIS ASSEMBLY	.....
NSP	110	KICK LEVER	.....
NSP	111	STOPPER	.....
NSP	112	HEAD PANEL	.....
NSP	113	HEAD PANEL	.....
NSP	114	GEAR PLATE ASSEMBLY	.....
NSP	115	SENSOR	.....
NSP	116	MOTOR BRACKET	.....
NSP	117	LUG PLATE	.....
NSP	118	KICK LEVER (A)	.....

1.9 PCB PARTS LIST

NOTES :

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω → 56 × 10^1 → 561 ..... RD1/8PM 5 6 1 J
47kΩ → 47 × 10^3 → 473 ..... RD1/4PS 4 7 3 J
0.5Ω → 0R5 ..... RN2H 0 R 5 K
1Ω → 010 ..... RS1P 0 1 0 K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ → 562 × 10^1 → 5621 ..... RM1/4PC 5 6 2 1 F

Mark	No.	Description	Parts No.
LIST OF ASSEMBLIES			
		PWR. SUPPLY PCB ASSY	AZW7061
		VOL. IND. PCB ASSY	AZW7065
		R/P SW PCB ASSY	AZW7066
		CONNECTOR PCB ASSY	AZW7067
		CD SENSOR PCB ASSY	AZW7068
		CD LAMP PCB ASSY	AZW7069
		MAIN PCB ASSY	AZW7070
		FRONT PCB ASSY	AZW7071
		H/P PCB ASSY	AZW7072
		M. VR PCB ASSY	AZW7073
		CD DECODER PCB ASSY	AZW7074
		CD CONTROL PCB ASSY	AZW7075
PWR. SUPPLY PCB ASSY			
SEMICONDUCTORS			
		IC501	UPC78L05J
		Q501	2SC2001
		Q502–Q504	2SC945
		D506–D508	1SS176T
		D501	AZQ7013
		D502, D504, D505	HSS104–02
		D503	MTZ13A
RELAY			
		RY501	AZS7009
CAPACITORS			
		C501–C504, C507–C509, C511, C514	AZC7039
		C506, C510	CEAS101M16
		C516	CEAS221M16
		C517	CEAS331M16
		C505	CEAS332M25
		C515	CEAS470M10
		C512	CEAS470M16
		C513	CEAS4R7M50
RESISTORS			
		R503	RD1/2PMF181J
		R501	AZC7059
		R502	RD1/4PM471J
		R513	RD1/4PM472J
		Other Resistors	RD1/6PM□□□J

Mark	No.	Description	Parts No.
OTHERS			
	FR501, FR502	FUSE	AZE7018
	H501	FUSE HOLDER	AZK7021
	A'	WIRE HOLDER 11P 20	AZK7078
		TERMINAL PIN "L"	AZK7079
		FTW (2.0) 11 BLK 220 4 (PWR. SUPPLY PCB A' – MAIN PCB A)	AZK7080
VOL. IND. PCB ASSY			
SEMICONDUCTOR			
	D281		AZA7089
OTHERS			
		2P CON. ASS'Y 200M/M	AZD7020
		LED HOLDER	AZK7050
		VOL. IND. PCB	AZN7161
R/P SW PCB ASSY			
SWITCH			
	S604		AZS7008
OTHERS			
	T'	WIRE HOLDER 5P 20	AZK7051
		TERMINAL PIN "K"	AZK7052
		FTW (2.0) 5 BLK 260 4. (R/P SW PCB T' – MAIN PCB T)	AZK7053
		R/P SW PCB	AZN7162
CONNECTOR PCB ASSY			
OTHERS			
		4P CON. ASS'Y 140M/M (CONNECTOR PCB Y – R/P DECK SW)	AZD7021
		4P CON. ASS'Y 240M/M (CONNECTOR PCB X – PLAY DECK SW)	AZD7022
	Z	WIRE HOLDER 4P25	AZK7054
	S'	WIRE HOLDER 10P 20	AZK7055
		FTW (2.5) 4 BLK 180 6/ (CONNECTOR PCB Z' – DECK MOTOR)	AZK7056
		FTW (2.0) 10 BLK 260 4 (CONNECTOR PCB S' – MAIN PCB S)	AZK7057
		CONNECTOR PCB	AZN7163

Mark	No.	Description	Parts No.
CD SENSOR PCB ASSY			
SEMICONDUCTORS			
	PH1		AZQ7007
	D17		AZQ7008
OTHERS			
	CN04	WIRE HOLDER 3P20	AZK7058
		2 LED HOLDER	AZK7059
		FTW (2.0) 3 BLK 240 4. (CN04 – CN04)	AZK7060
		CD SENSOR PCB	AZN7164
CD LAMP PCB ASSY			
OTHERS			
	LP01, LP02	PILOT LAMP 6V/60MA	AZE7006
	CN10	WIRE HOLDER 2P20	AZK7061
		FTW (2.0) 2 BLK 140 4. (CN10 – CN10)	AZK7062
		CD LAMP PCB	AZN7165
MAIN PCB ASSY			
SEMICONDUCTORS			
	IC401		AZQ7009
	IC602		AZQ7010
	IC101		LA1186N
	IC102		LA1805
	IC201		LC7821
	IC202		NJM4558LD
	IC601		TA7784P
	IC421, IC422		UPC78M12H
	Q107, Q108, Q606, Q612		2SA733
	Q101		2SC1674
	Q102, Q110, Q111, Q4011, Q4012		2SC1675
	Q609–Q611		2SC2001
	Q4011, Q4012		2SC2878
	Q104–Q106, Q109, Q112, Q605, Q613, Q6011, Q6012, Q6031, Q6032, Q6041, Q6042, Q6071, Q6072, Q6081, Q6082		2SC945
	Q103		2SK161
	D601, D602		1N4002L
	D103, D201, D202, D401, D603, D605–D608, D610–D613		1SS176T
	D104A, D104B		AZQ7006
	D421		AZQ7011
	D101, D102		AZQ7012
	D105, D107, D108, D604		HSS104–02
	D614		MTZ4.7B
	D106		MTZ5.6B
COILS AND FILTERS			
	L103		AZT1072
	L102		AZT1074
	T101		AZT1080
	T104		AZT1081
	T103		AZT1082
	L104		AZT7002
	T102		AZT7003
	CF103		AZT7004
	L101		AZT7005
	CF101, CF102		AZT7015
	L604		AZT7018
	L6031, L6032		AZT7019
	L6011, L6012		AZT7020
	L605, L606		AZT7021

Mark	No.	Description	Parts No.
CAPACITORS			
	TC101–TC103 (10p)		ACM–021
	C132, C135, C158, C213		AZC7004
	C425		AZC7029
	C113		AZC7036
	C1561, C1562		AZC7037
	C427, C429		AZC7038
	C104, C110, C112, C118, C119, C125, C126, C137, C139, C159, C608, C655, C656		AZC7039
	C109, C6131, C6132		AZC7040
	C140, C145, C150, C6101, C6102, C6201, C6202		AZC7041
	C114, C2081, C2082, C4021, C4022		AZC7042
	C101, C102, C127–C129, C144, C147–C149, C151, C152, C1531, C1532, C6051, C6052, C6441, C6442		AZC7043
	C138, C6351, C6352		AZC7044
	C6141, C6142		AZC7045
	C6091, C6092		AZC7046
	C6211, C6212, C6291, C6292, C6301, C6302		AZC7047
	C6011, C6012		AZC7048
	C6241, C6242		AZC7060
	C2091, C2092		AZC7061
	C6151, C6152		AZC7050
	C116		CCPUCH100J50
	C105		CCPUCH180J50
	C106		CCPUCH4R7K50
	C107		CCPUSL2R2K50
	C146		CCPUSL300J50
	C103		CCPUSL3R3K50
	C134		CCPUSL470J50
	C108		CCPUSL560J50
	C6321, C6322		CEANP010M50
	C401		CEANP470M16
	C136, C1541, C1542, C426, C6221, C6222, C6231, C6232, C6331, C6332, C645, C657		CEAS010M50
	C117, C2121, C2122, C6421, C6422		CEAS100M25
	C157		CEAS101M10
	C124, C130, C210, C211, C617, C619, C626		CEAS101M16
	C404, C410		CEAS101M63
	C4091, C4092		CEAS102M50
	C133, C627, C634		CEAS220M16
	C4071, C4072, C625, C653, C654		CEAS221M16
	C2011, C2012, C2031, C2032, C2041, C2042, C2051, C2052		CEAS2R2M50
	C141, C142		CEAS3R3M50
	C122		CEASR47M50
	C207, C6121, C6122, C628		CEAS470M16
	C403, C4061, C4062		CEAS470M25
	C602		CEAS471M10
	C428, C430		CEAS471M16
	C6061, C6062, C607, C6161, C6162		CEAS4R7M50
	C206, C4051, C4052		CEASR10M50
	C131		CKCYF223Z50
	C4081, C4082		CQMA104K50
	C650		CQMA153K50
	C648, C649		CQMA332J50
	C651		CQMA472J50
	C115		CQMA561J50
	C652		CQMA682J50
	C143		CQSA152J50

Mark	No.	Description	Parts No.
RESISTORS			
	VR101, VR609		VRTP6VS103
	VR607, VR608		VRTP6VS204
	R148 (220, W= 1/2)		AZC7002
	R4121, R4122		RS1/2LMF4R7J
	R219, R410		AZC7033
	R656		RD1/4PM010J
	R113		RD1/4PM101J
	R105, R117, R120, R209, R213, R4131, R4132		RD1/4PM102J
	R103, R139		RD1/4PM104J
	R4111, R4112		RD1/4PM123J
	R2051		RD1/4PM124J
	R616		RD1/4PM221J
	R617		RD1/4PM223J
	R1461, R1462, R221		RD1/4PM272J
	R132		RD1/4PM470J
	R145		RD1/4PM471J
	R129		RD1/4PM473J
	R4121, R4122		RD1/2LMF4R7J
	R658		RS1LMF221J
	Other Resistors		RD1/6PM□□□J
OTHERS			
	FR4011, FR4012	FUSE R. 1/2W 82 S	AZE7017
	T	5P FTW TOP BASE (2.0)	AZK7010
	C	WIRE HOLDER 5P20	AZK7051
	JK101	4P ANT TER.	AZK7063
	JK201	2P RCA JACK	AZK7064
	JK401	4P SPEAKER TER.	AZK7065
	A	11P FTW TOP BASE	AZK7066
	S	10P FTW TOP BASE	AZK7067
	CN603, TP601, TP605	EH 2P TOP BASE	AZK7068
	CN601, CN602	EH 3P TOP BASE	AZK7069
	CN602	EH 5P TOP BASE	AZK7070
	P	WIRE HOLDER 8P20	AZK7071
	F	MT 4P TOP BASE	AZK7072
	D, E	MT 4P TOP BASE	AZK7073
	G	PH 10P TOP BASE	AZK7074
	I, B	MT 8P TOP BASE	AZK7077

FRONT PCB ASSY

SEMICONDUCTORS

	IC252	AZQ7014
	IC001	AZQ7015
	IC251	NJM4558LD
	Q002–Q008	2SC945
	Q001	DTA114ES
	D001, D002, D004, D005, D010, D012, D014, D015	1SS176T
	D025, D026	AZA7089
	D021–D024	AZA7094
	D003, D006–D009, D016, D018, D020	HSS104–02
	D251	MTZ4.7B

SWITCHES

	S001–S019	ASG1029

Mark	No.	Description	Parts No.
CAPACITORS			
	C001, C004, C008, C010, C011		AZC7004
	C003		AZC7005
	C005		AZC7039
	C2581, C2582		AZC7042
	C009		AZC7045
	C2521, C2522		AZC7047
	C262		AZC7050
	C006, C007		CCCCH270J50
	C2541, C2542		AZC7062
	C2511, C2512		CEAS100M25
	C256, C257		CEAS101M16
	C2551, C2552		CEAS2R2M50
	C2531, C2532		CKCYF223Z50
RESISTORS			
	VR251, VR252		AZC7030
	R259		AZC7002
	R011, R019		RD1/4PM102J
	R017		RD1/4PM222J
	R016		RD1/4PM271J
	R001		RD1/4PM390J
	R012–R015, R018		RD1/4PM472J
	R005		RD1/4PM473J
	Other Resistors		RD1/6PM□□□J
OTHERS			
	LCD001	LCD DISPLAY	AZA7090
		DISPLAY PLATE	AZA7095
	X001	X'TAL (4.5MHz)	AZC1263
		8P CON. ASS'Y 300M/M (FRONT PCB I' – MAIN PCB I)	AZD7023
		8P CON. ASS'Y 400M/M (FRONT PCB B' – MAIN PCB B)	AZD7024
		4P CON. ASS'Y 300M/M (FRONT PCB F' – MAIN PCB F)	AZD7025
		4P CON. ASS'Y 300M/M (FRONT PCB E' – MAIN PCB E)	AZD7026
		PILOT LAMP	AZE7006
		REMOTE RECEIVER	AZE7019
		2P CON. ASS'Y BLK 450 (FRONT PCB H' – MAIN PCB H)	AZK7020
		LED HOLDER	AZK7050
		DISPLAY CHASSIS	AZN7166
		SCREW	BBZ30P100FMC

H/P PCB ASSY

RESISTORS

	R4211, R4212	RS1LMF331J

OTHERS

	C'	WIRE HOLDER 5P20	AZK7051
	JK421	H/P JACK	AZK7081
		FTW (2.0) 5 BLK 450 4. (H/P PCB C' – MAIN PCB C)	AZK7082
		H/P PCB	AZN7167

M. VR PCB ASSY

SEMICONDUCTORS

	Q2811, Q2812	2SC2878

CAPACITORS

	C282	AZC7004
	C2811, C2812	AZC7063

Mark	No.	Description	Parts No.
RESISTORS			
	VR281		AZC7031
	Other Resistors		RD1/6PM□□□J
OTHERS			
		3P CON. ASS'Y 450M/M (M. VR PCB D' – MAIN PCB D)	AZD7027
	P'	WIRE HOLDER 8P20	AZK7071
	Q	PH 2P TOP BASE (2.0)	AZK7083
		FTW (2.0) 8 BLK 300 4. (M. VR PCB P' – FRONT PCB P)	AZK7084
		M. VR PCB	AZN7168

CD DECODER PCB ASSY

SEMICONDUCTORS

	IC01	AZQ7016
	IC04	AZQ7017
	IC03	AZQ7018
	IC05	AZQ7019
	IC06, IC07	NJM4558LD
	Q06, Q11	2SA733
	Q01–Q03, Q05, Q07, Q14	2SA952
	Q08, Q10	2SC2001
	Q04, Q09, Q12, Q13	2SC945
	D05–D08	1N4002L
	D01, D02, D12, D13	1SS176T
	D04	RD10ESB2
	D03, D09	RD5.1ESB1

COILS

	L01, L03	AZT7016
	L04	AZT7017

CAPACITORS

	C09, C13, C15, C16, C18, C26, C28, C32, C34, C35, C38, C45, C47, C73	AZC7004
	C57, C58, C60	AZC7039
	C44	AZC7040
	C37	AZC7041
	C43, C62	AZC7043
	C70, C71	AZC7045
	C07, C10, C20, C27, C36, C42, C95, C96	AZC7050
	C33	AZC7052
	C82, C83	AZC7053
	C06, C12	AZC7054
	C86, C87	AZC7055
	C31	AZC7056
	C14	AZC7057
	C63	CCPUSL220J50
	C64	CCPUSL240J50
	C78–C81	CCPUSL470J50
	C61	CEANP010M50
	C46	CEAS010M50
	C48	CEAS100M25
	C04, C53	CEAS101M10
	C54, C55	CEAS101M16
	C24	CEAS220M16
	C56	CEAS222M16
	C23	CEAS3R3M50
	C22, C25, C29, C72	CEAS471M10
	C59	CEAS471M16
	C19, C41	CEAS4R7M50
	C89, C92	CEASR47M50
	C08, C11, C17, C21	CQMA333J50
	C84, C85	CQMA471J50

Mark	No.	Description	Parts No.
RESISTORS			
	VR01		VRTP6VS503
	R53	(180, W= 1)	AZC7012
	R65		RD1/4PM103J
	Other Resistors		RD1/6PM□□□J
OTHERS			
	CF01	(4.00MHZ)	ASS1025
	LCD01	LCD DISPLAY	AZA7092
		LCD DISPLAY HOLDER	AZA7093
	XTL01	X'TAL (33.8688MHz)	AZC7058
		6P CON. ASS'Y 400M/M	AZD7028
	J8	10P CON. ASS'Y 750M/M	AZD7031
	CN1	PH 5P TOP BASE	AZK7012
	CN2	PH 8P TOP BASE	AZK7022
	CN4	WIRE HOLDER 3P20	AZK7058
	CN10	WIRE HOLDER 2P20	AZK7061
	CN15	EH 2P TOP BASE	AZK7068
	CN8	WIRE HOLDER 11P 20	AZK7078
	CN6	EH 2P SIDE BASE	AZK7085
	CN5	EH 3P SIDE BASE	AZK7086
	CN7	EH 4P SIDE BASE	AZK7087
		FILTER PLATE	AZK7088
		SCREW	BBZ30P060FMC

CD CONTROL PCB ASSY

SWITCHES

	S01–S15	ASG1029

OTHERS

	CN09	8P CON. ASS'Y 160M/M	AZD7030

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The Art of Entertainment

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STEREO DOUBLE DECK CD RECEIVER

XR-P240C

CHAPTER 2

CONTENTS

CHAPTER 2
2.1 PACKING AND EXPLODED VIEWS ··· 2–2
2.2 SCHEMATIC AND PCB CONNECTION DIAGRAMS ····· 2–7
2.3 BLOCK DIAGRAM ····· 2–31

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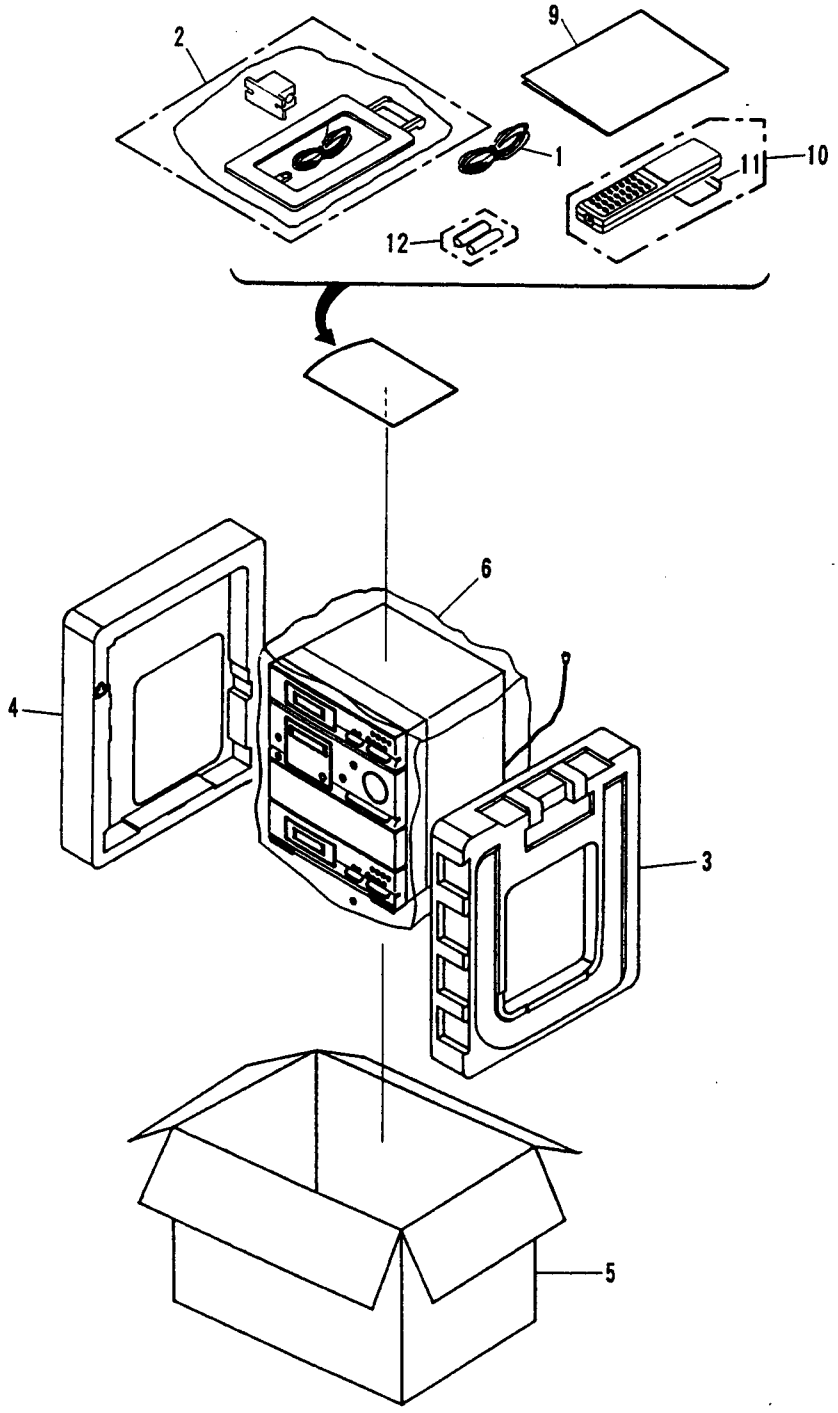
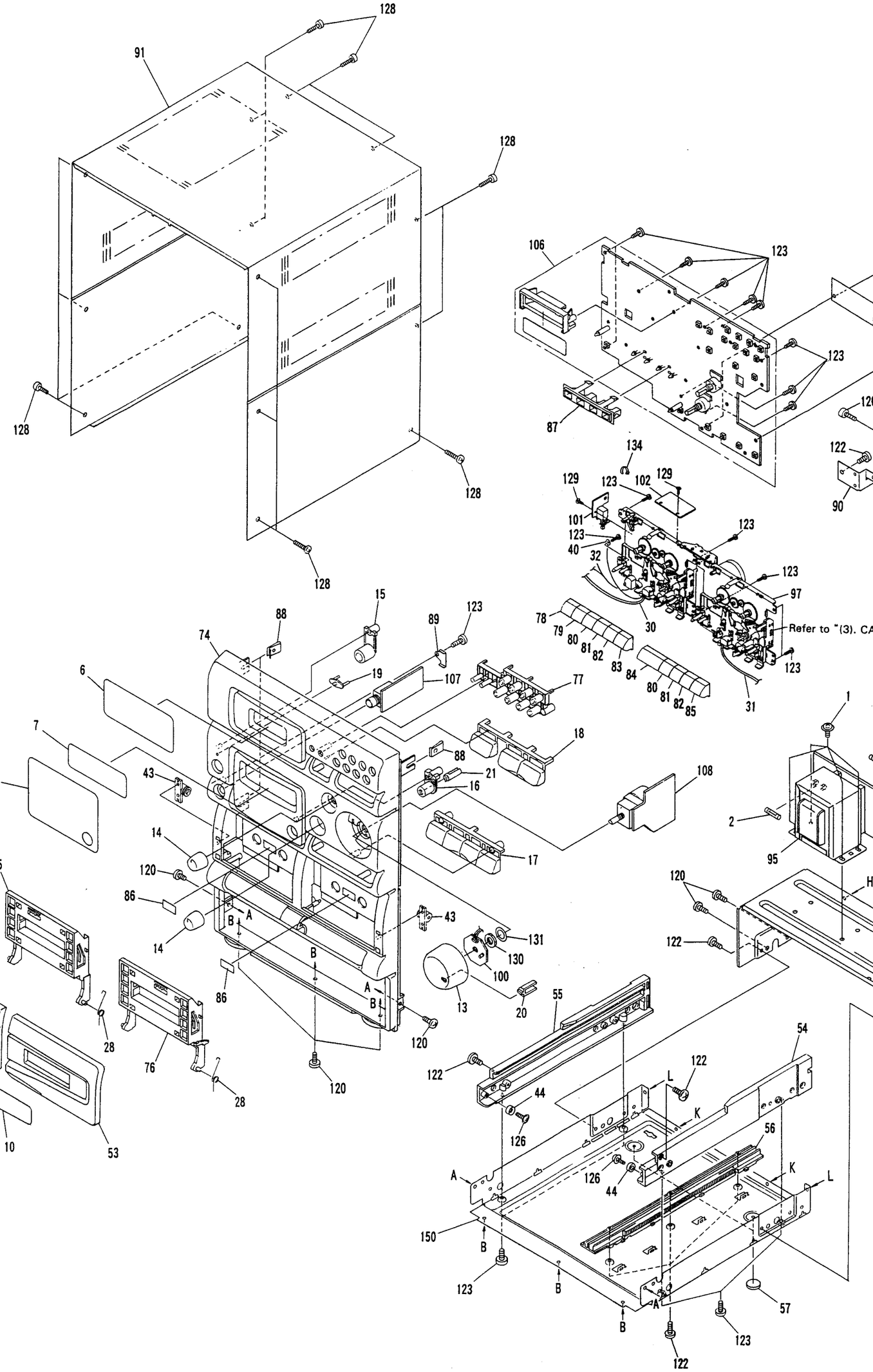
T–DFF JULY 1994 Printed in Japan

2.1 PACKING AND EXPLODED VIEWS

(1). PACKING

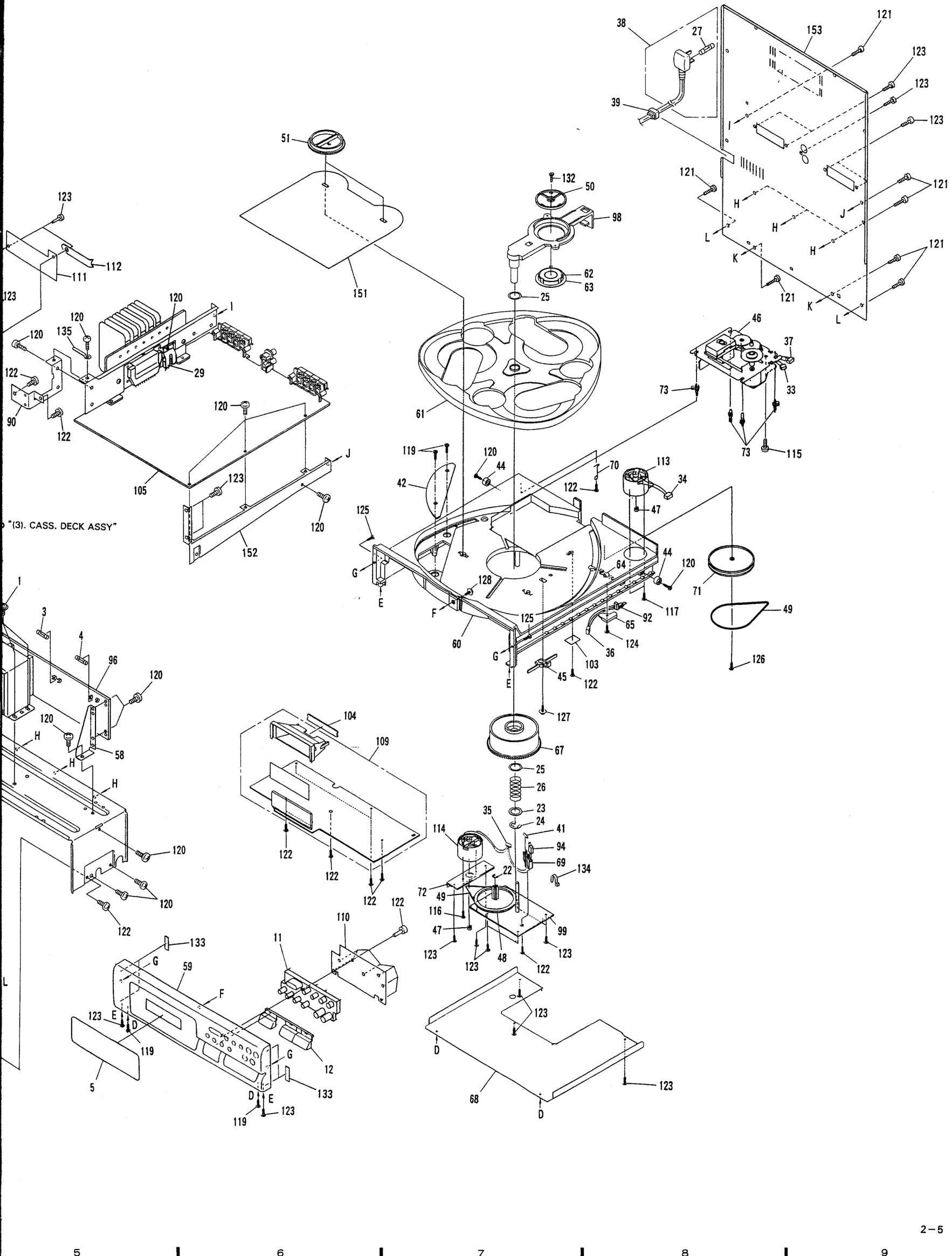


(2). EXTERIOR



NOTE : Screws adjacent to ▼ mark on the product are used for disassembly.

"(3). CASS. DECK ASSY"



2.2 SCHEMATIC AND PCB DIAGRAM

(1). CONNECTION DIAGRAM

SCHEM
1. THE DC
TAKEN
2. ALL VO
WITH A
3. RESIST
(K-100
4. UNLESS
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OF CA
6. ⏚ =
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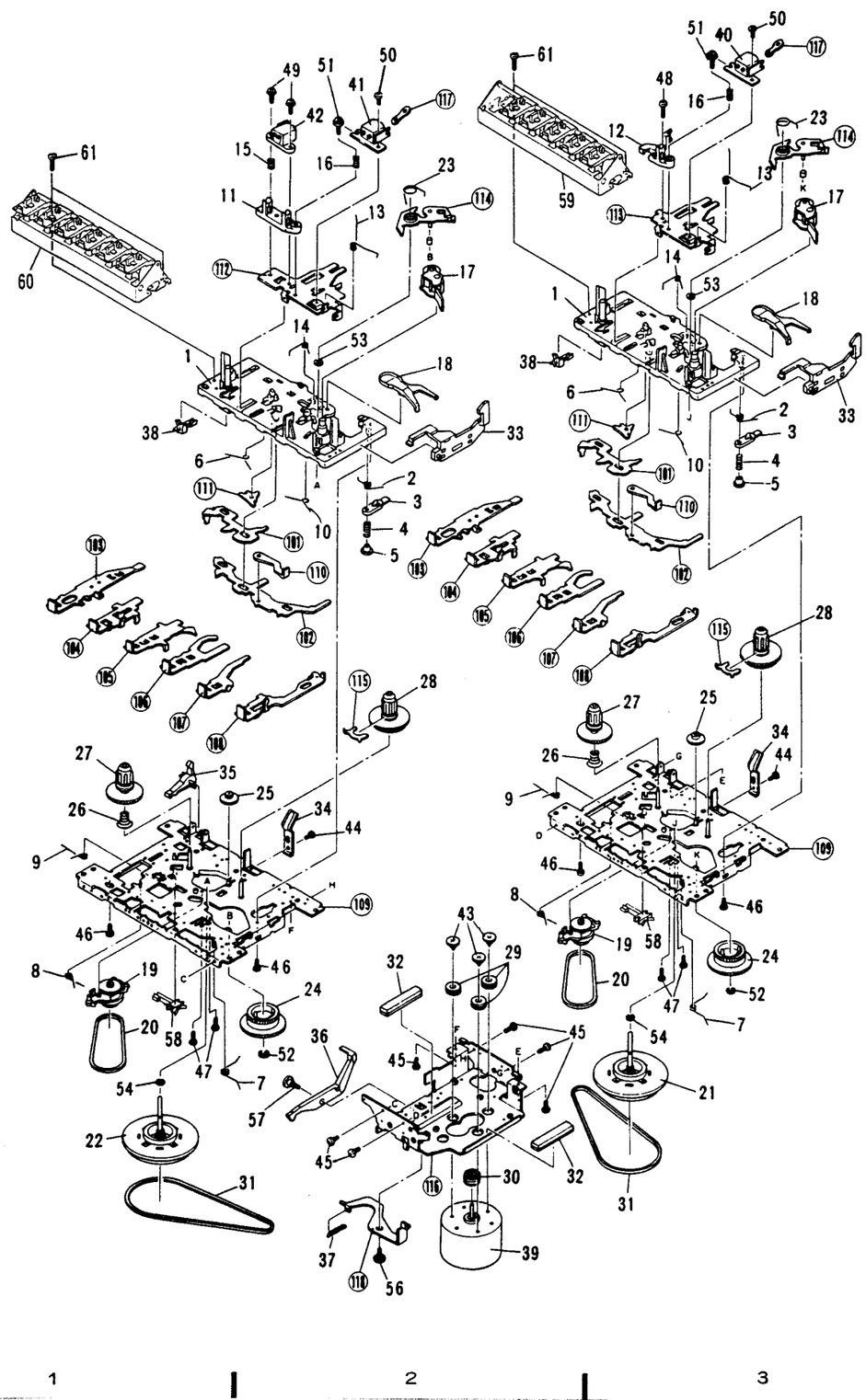
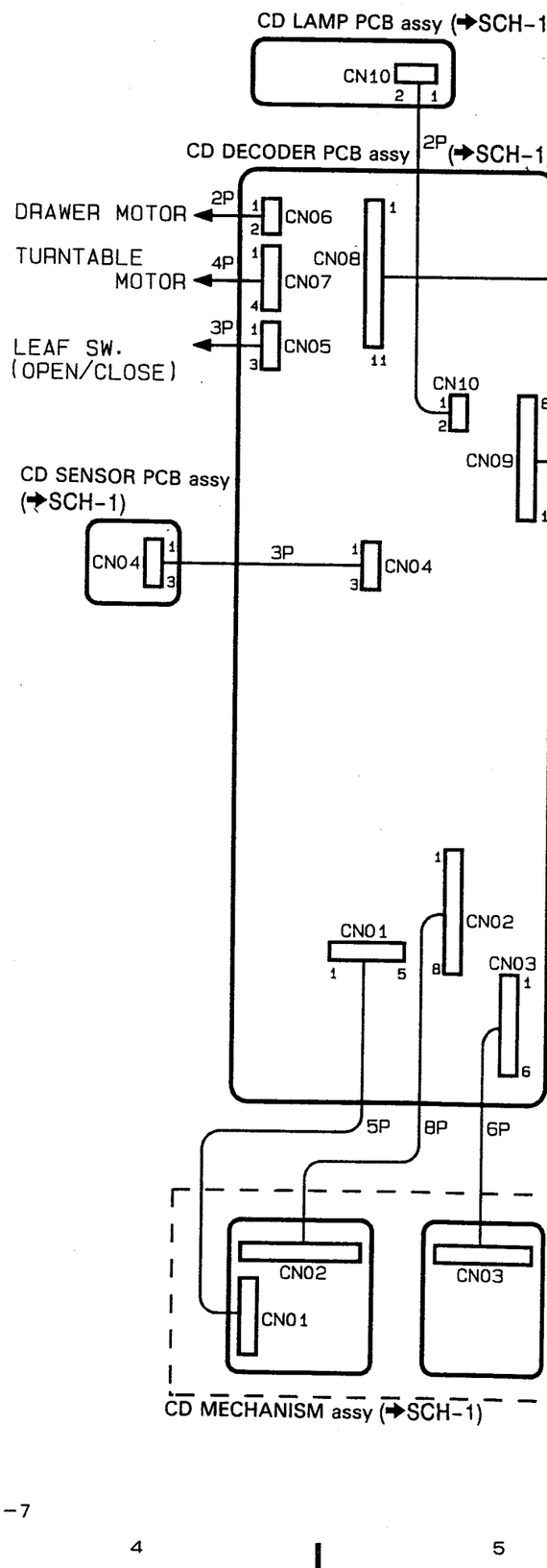
(3). CASS. DECK ASSY





GRAMS

SCHEMATIC NOTES:

1. THE DC VOLTAGES WERE TAKEN WITH NO SIGNAL INPUT.
2. ALL VOLTAGES MEASURED FROM GROUND WITH A HIGH IMPEDANCE METER (10 MEGOHMS MIN).
3. RESISTANCE VALUES ARE IN OHMS (K=1000, M=MEGOHM).
4. UNLESS OTHERWISE NOTED, ALL RESISTORS ARE 1/6 WATT CARBON FILM. ±5% TOLERANCE.
5. REFER TO PARTS LIST FOR VOLTAGE RATINGS OF CAPACITORS.
6. ⏚ = COMMON GROUND SYMBOL.
7. TO LOCATE CONNECTOR HOOKUPS MATCH THE ALPHA (OR NUMERIC) DESIGNATION TO THE CORRESPONDING ALPHA (OR NUMERIC) DESIGNATION (EXAMPLE : CONNECTOR "A" CONNECTS TO CONNECTOR "A").
8. SCH-□ ON THE SCHEMATIC DIAGRAM :
   - ● SCH-□ INDICATES THE DRAWING NUMBER OF THE SCHEMATIC DIAGRAM.
   (SCH STANDS FOR SCHEMATIC DIAGRAM.)
9. SWITCHES (UNDERLINE INDICATES SWITCH POSITION) :

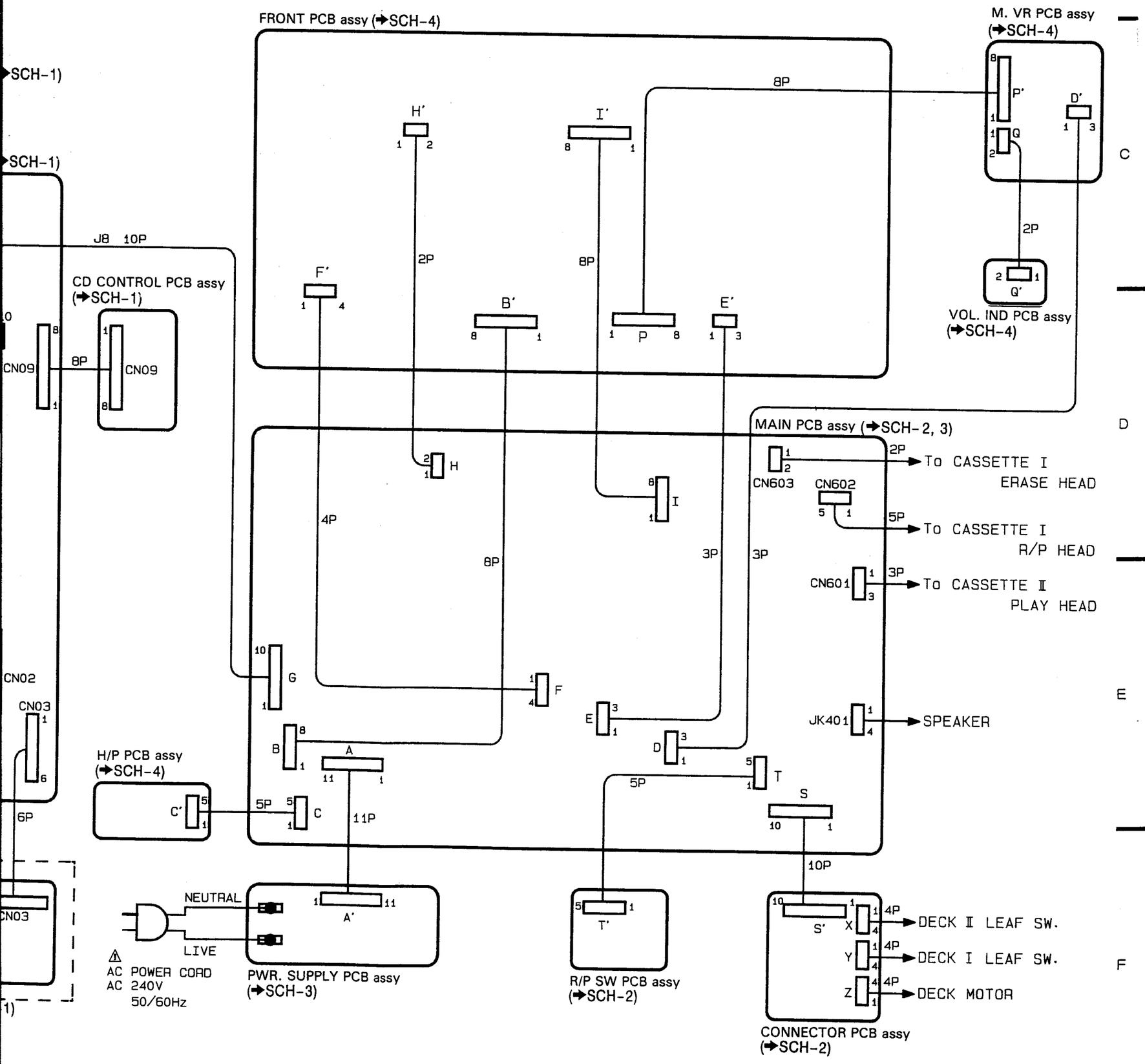
FRONT PCB assy		CD CONTROL PCB assy	
S001	M1	S01	◄◄
S002	M2	S02	►►
S003	M3	S03	I◄◄
S004	M4	S04	►►I
S005	M5	S05	SYNCHRO
S006	M6	S06	PROGRAM
S007	M7	S07	EDIT
S008	M8	S08	TIME
S009	+	S09	SCAN
S010	−	S10	■
S011	MEMORY	S11	OPEN /CLOSE
S012	MONO	S12	►/II
S013	BAND	S13	RANDOM
S014	POWER	S14	REPEAT
S015	P. BASS		
S016	TUNER	R/P SW PCB assy	
S017	CD	S604	PLAY/REC
S018	TAPE		
S019	AUX		

Note: The parts which have been mounted on the PCB can be replaced with those shown with the corresponding wiring symbols listed in the following table.

PCB Pattern Diagram Indication	Corresponding Part Symbol	Part Name
Q504	or	Transistor
Q215	or	FET
D203	D203	Diode
R237	R237	Resistor
C513	C513	Capacitor (Polarized)
C518	C518	Capacitor (Non-Polarized)

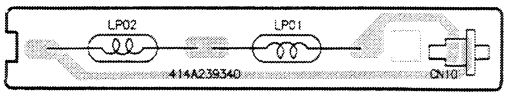
Others

PCB Pattern Diagram Indication	Part Name
IC	IC
S	Switch
L	Coil
CF	Filter
VR or SFR	Variable Resistor or Semi-Fixed Resistor



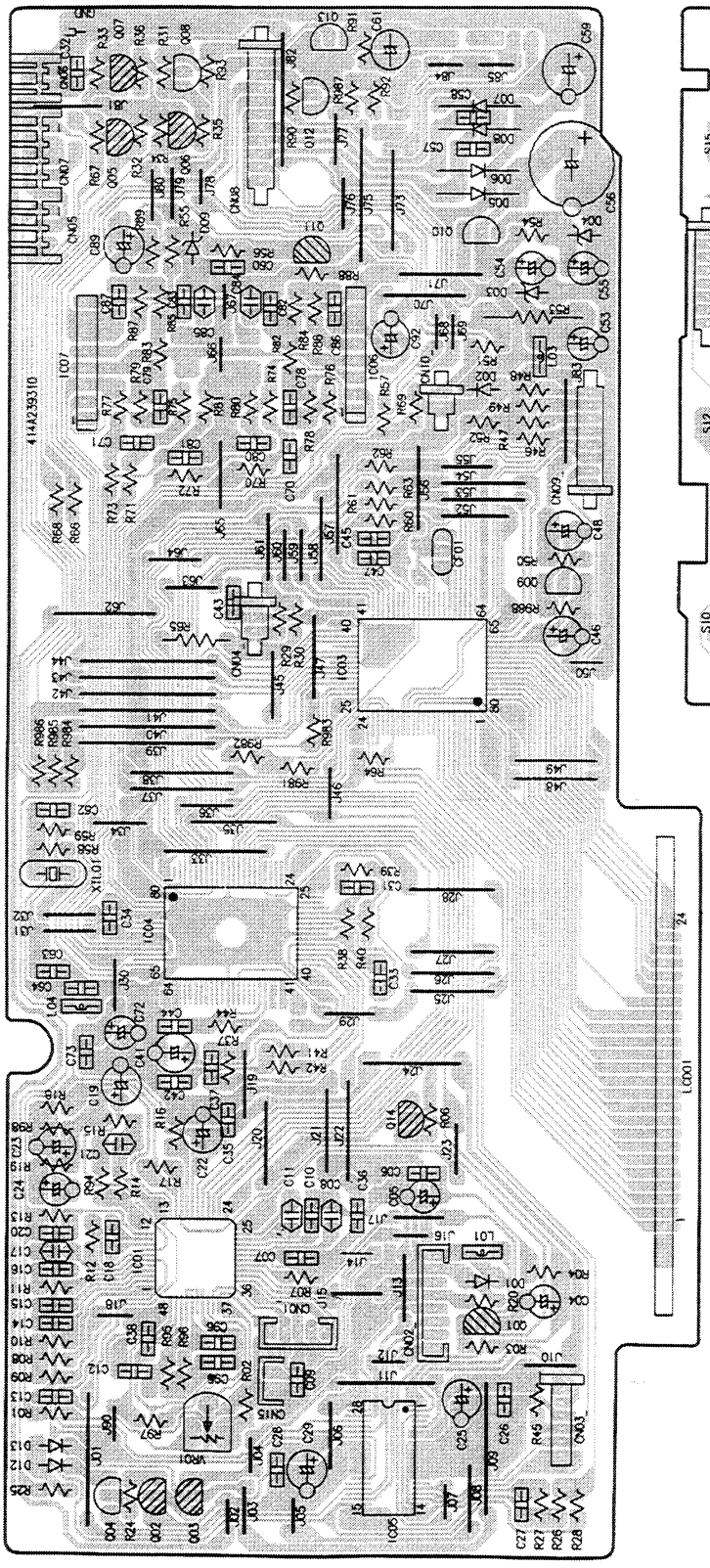
(2). CD DECODER PCB ASSY, CD LAMP PCB ASSY, CD CONTROL PCB ASSY, CD SENSOR PCB ASSY AND CD MECHANISM ASSY

CD LAMP PCB assy

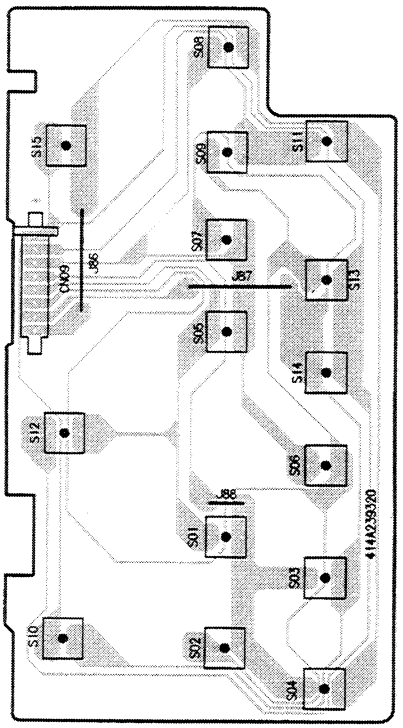


• This diagram is viewed from the mounted parts side.

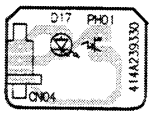
CD DECODER PCB assy



CD CONTROL PCB assy



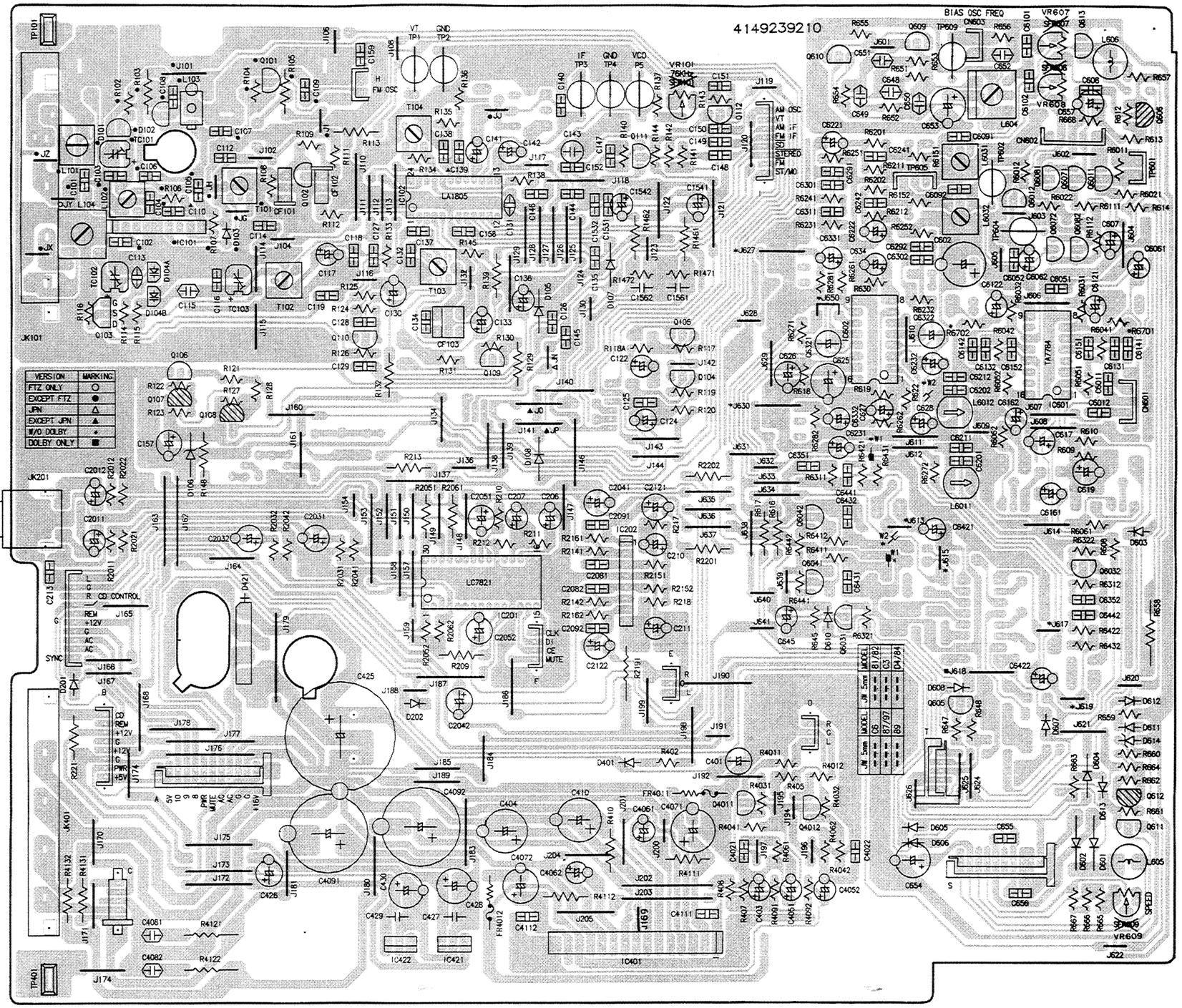
CD SENSOR PCB assy



PCB-2

- This diagram is viewed from the mounted parts side.

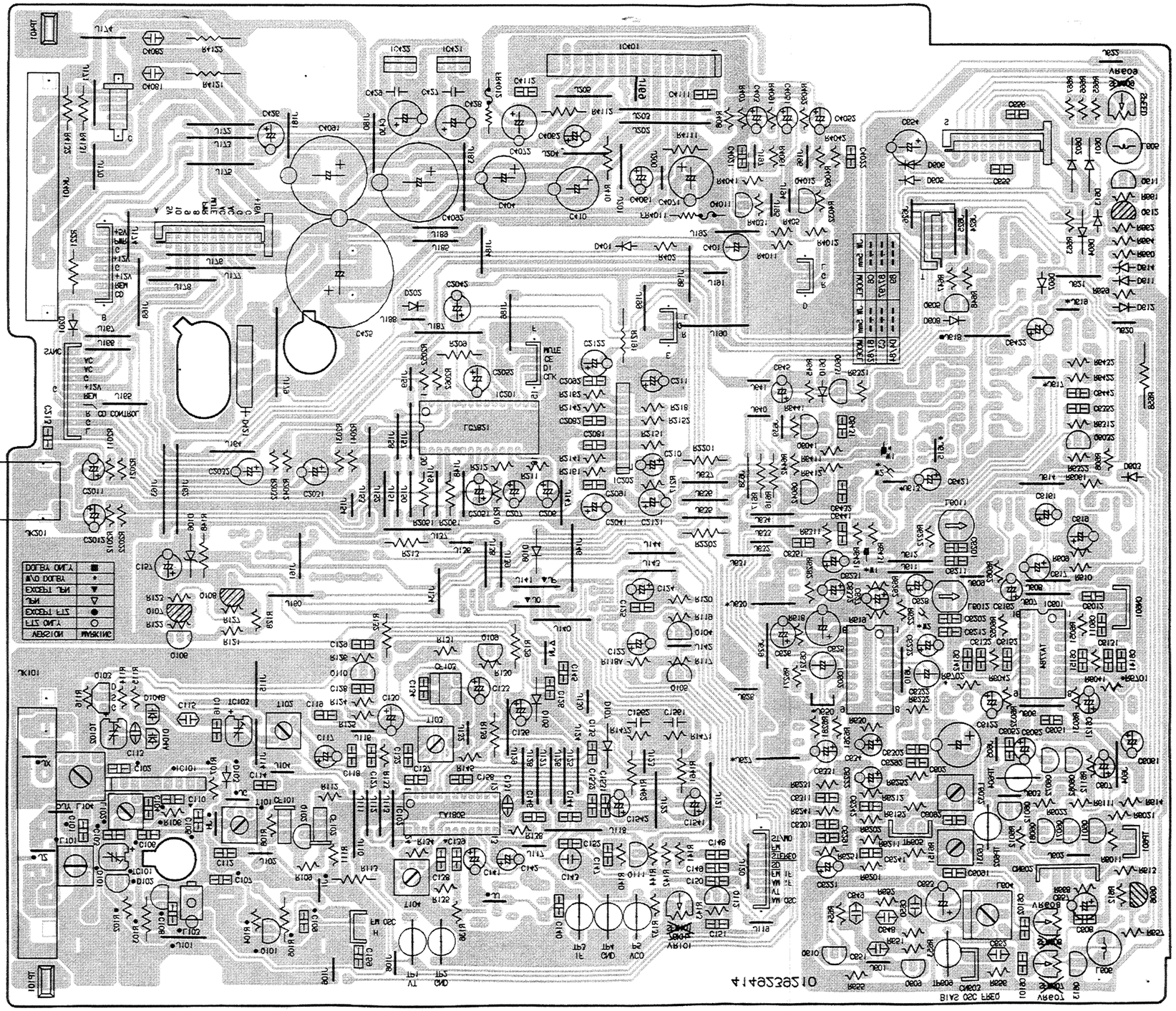
MAIN PCB assy



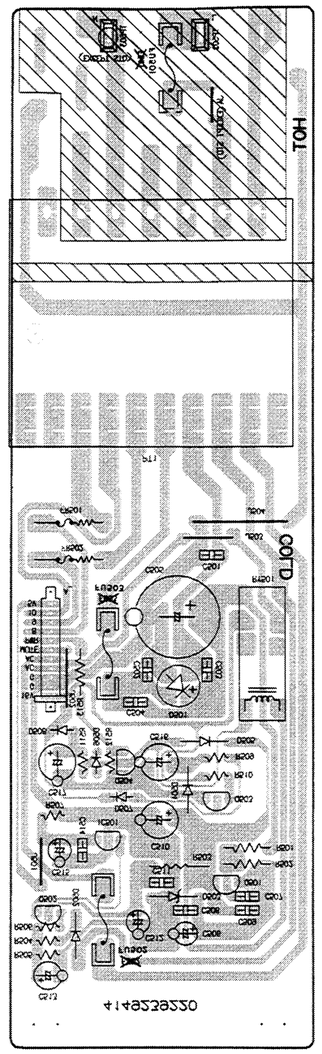
XR-P540C

● This diagram is viewed from the foil side.

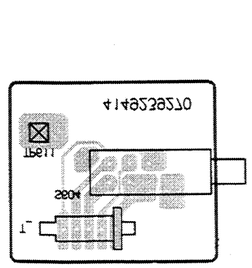
MAIN PCB ass'y



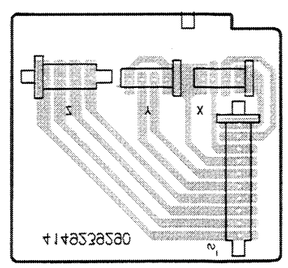
PWR. SUPPLY PCB ass'y

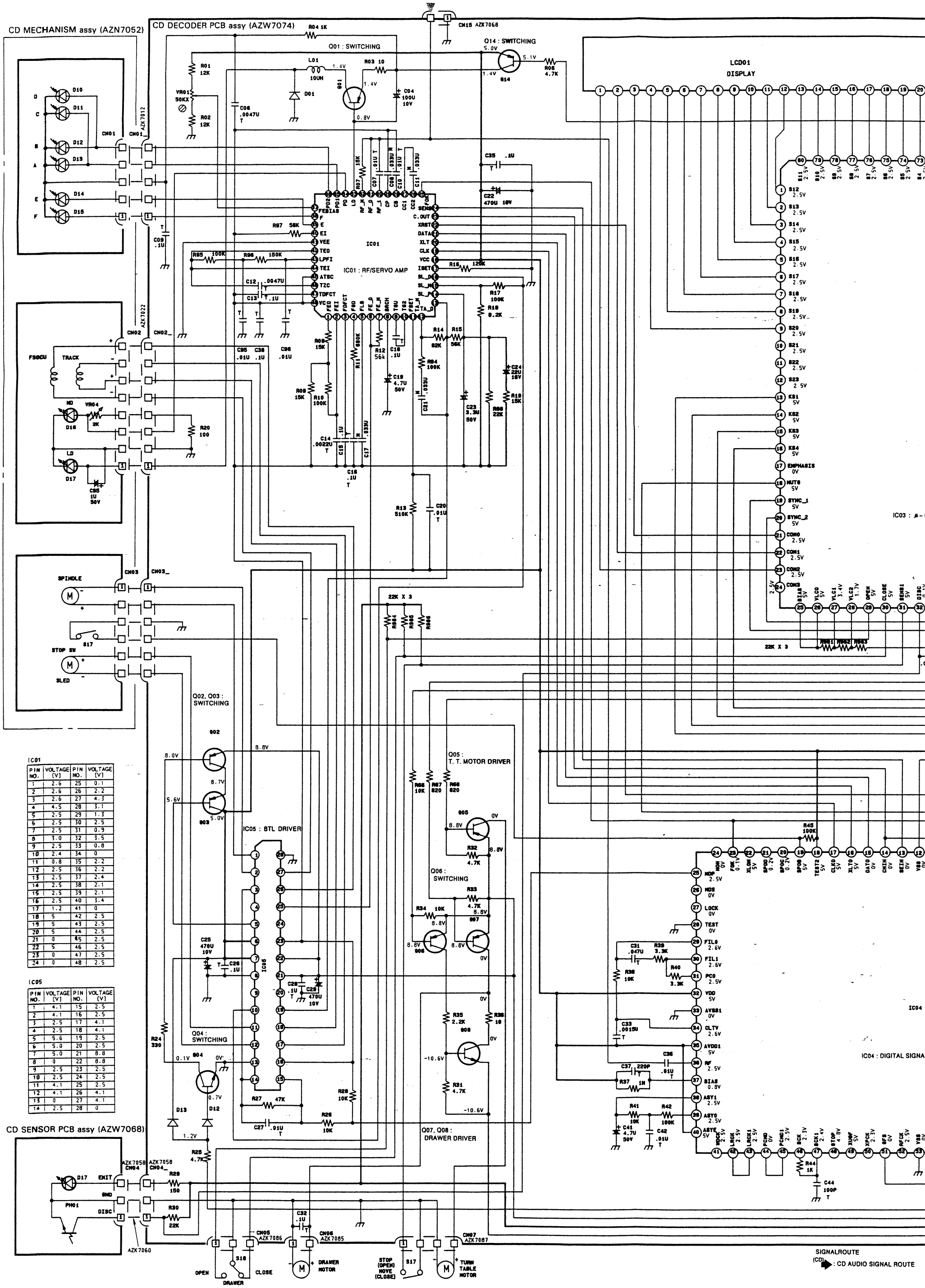


R/P SW PCB ass'y



CONNECTOR PCB ass'y





IC01

PIN NO.	VOLTAGE [V]	PIN NO.	VOLTAGE [V]
1	2.6	25	0.1
2	2.6	26	2.2
3	2.6	27	4.3
4	4.5	28	3.1
5	2.5	29	1.3
6	2.5	30	2.5
7	2.5	31	0.9
8	3.0	32	3.5
9	2.5	33	0.8
10	2.4	34	0
11	0.8	35	2.2
12	2.5	36	2.2
13	2.5	37	2.4
14	2.5	38	2.1
15	2.5	39	2.1
16	2.5	40	3.4
17	1.2	41	0
18	5	42	2.5
19	5	43	2.5
20	5	44	2.5
21	0	45	2.5
22	5	46	2.5
23	0	47	2.5
24	0	48	2.5

IC05

PIN NO.	VOLTAGE [V]	PIN NO.	VOLTAGE [V]
1	4.1	15	2.5
2	4.1	16	2.5
3	2.5	17	4.1
4	2.5	18	4.1
5	5.6	19	2.5
6	5.0	20	2.5
7	5.0	21	8.8
8	0	22	8.8
9	2.5	23	2.5
10	2.5	24	2.5
11	4.1	25	2.5
12	4.1	26	4.1
13	0	27	4.1
14	2.5	28	0

SCH−1

CD DECODER PCB ASSY, CD LAMP PCB ASSY,
CD CONTROL PCB ASSY, CD SENSOR PCB ASSY,
CD MECHANISM ASSY

SCH-1

CD LAMP PCB assy (AZW7069)

CD CONTROL PCB assy (AZW7075)

AZK7070 CN09

S01-S15 : ASG1029

IC03 : μ-COM

IC04 : DIGITAL SIGNAL PROCESSOR

IC03

IC04

Q09 : RESET

Q10 : REGULATOR

Q11 : MUTING

Q12 : MUTING

Q13 : MUTING

IC06 : RCH OP AMP

IC07 : LCH OP AMP

To MAIN PCB assy G (➡SCH-3)

CD DECODER PCB ASSY

IC01	AZQ7016
IC04	AZQ7017
IC03	AZQ7018
IC05	AZQ7019
IC06, IC07	NJM4558LD
Q06, Q11	2SA733
Q01–Q03, Q05, Q07, Q14	2SA952
Q08, Q10	2SC2001
Q04, Q09, Q12, Q13	2SC945
D05–D08	1N4002L
D01, D02, D12, D13	1SS176T
D04	RD10ESB2
D03, D09	RD5.1ESB1

CD SENSOR PCB ASSY

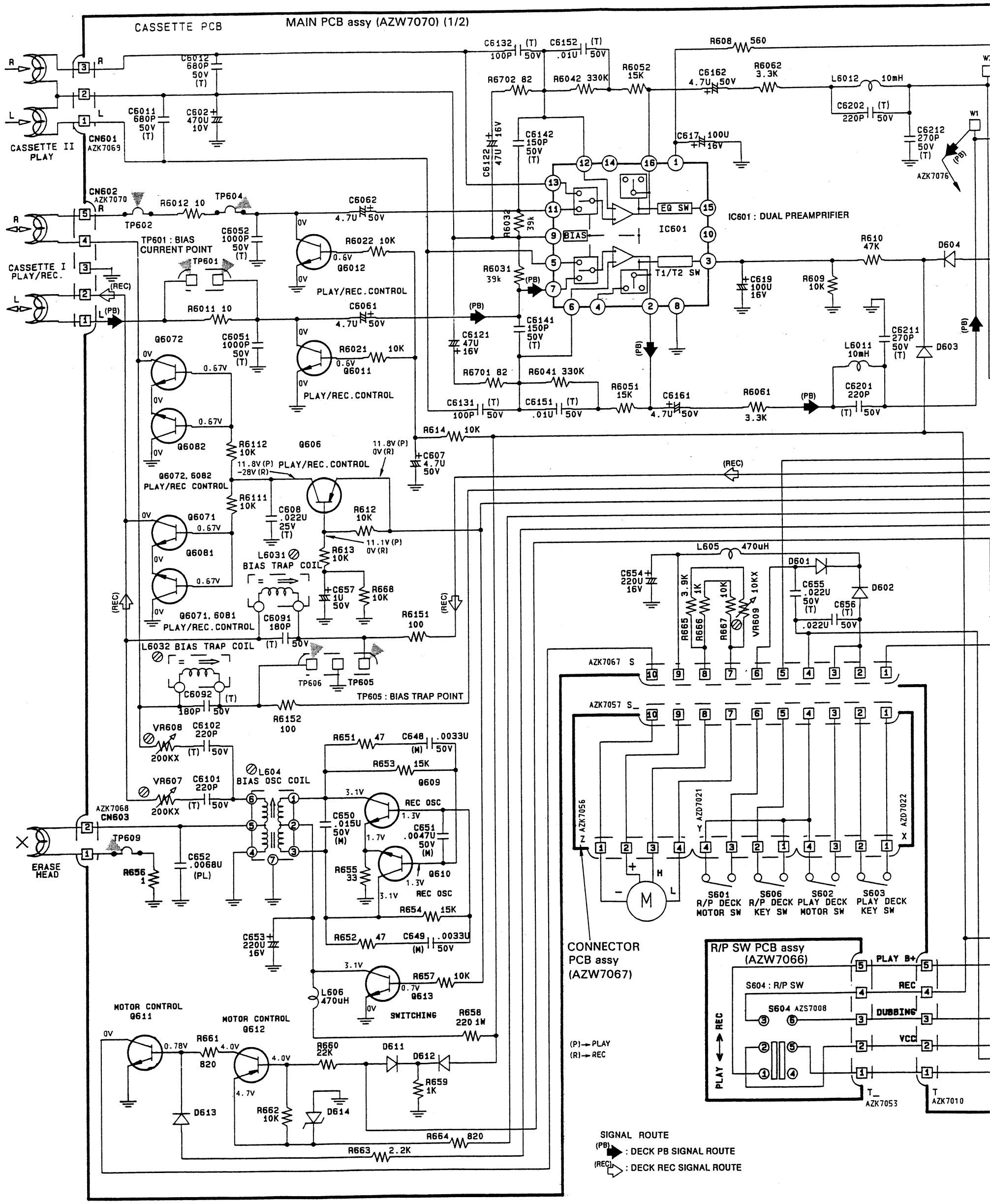
PH1	AZQ7007
D17	AZQ7008

SIGNAL ROUTE

CD DECODER PCB ASSY, CD LAMP PCB ASSY,
CD CONTROL PCB ASSY, CD SENSOR PCB ASSY,
CD MECHANISM ASSY

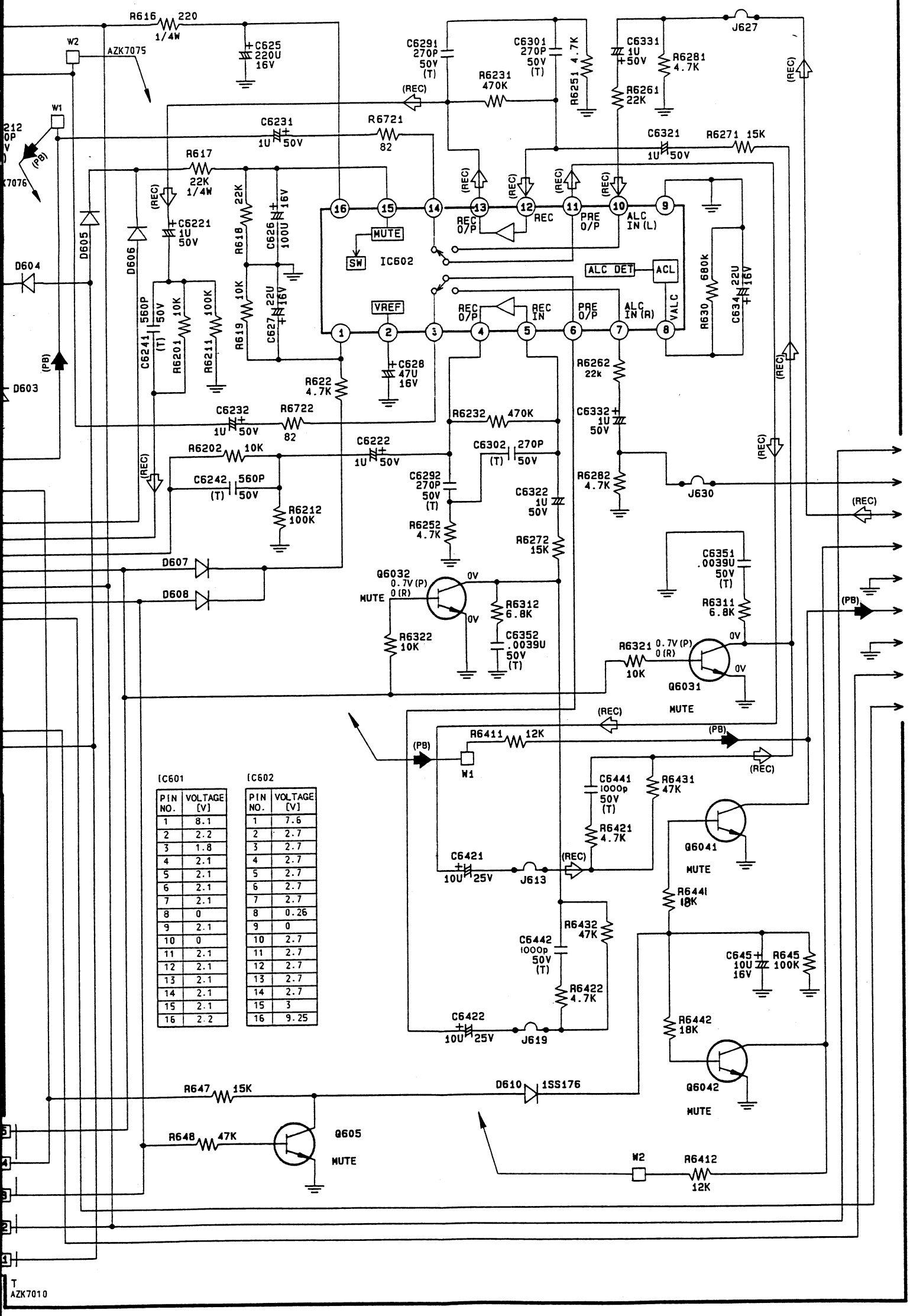
SCH-1

(3). MAIN PCB ASSY, R/P SW PCB ASSY, CONNECTOR PCB ASSY AND PWR. SUPPLY PCB ASSY



SCH−2 MAIN PCB ASSY (1/2), R/P SW PCB ASSY, CONNECTOR PCB ASSY

IC602 : DUAL RECORDING PRE-AMP WITH ALC



IC601

PIN NO.	VOLTAGE [V]
1	8.1
2	2.2
3	1.8
4	2.1
5	2.1
6	2.1
7	2.1
8	0
9	2.1
10	0
11	2.1
12	2.1
13	2.1
14	2.1
15	2.1
16	2.2

IC602

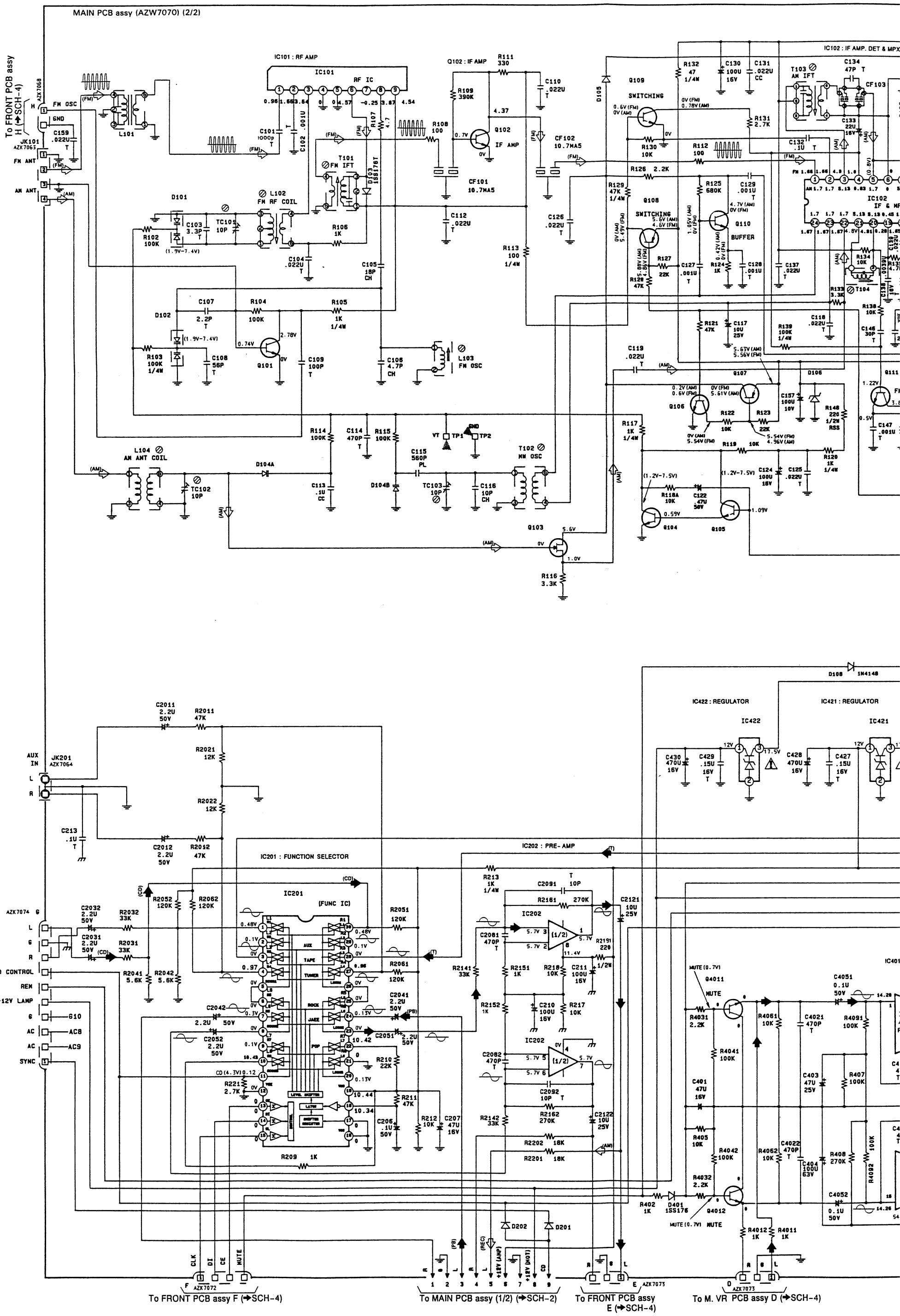
PIN NO.	VOLTAGE [V]
1	7.6
2	2.7
3	2.7
4	2.7
5	2.7
6	2.7
7	2.7
8	0.26
9	0
10	2.7
11	2.7
12	2.7
13	2.7
14	2.7
15	3
16	9.25

MAIN PCB ASSY

IC401	AZQ7009
IC602	AZQ7010
IC101	LA1186N
IC102	LA1805
IC201	LC7821
IC202	NJM4558LD
IC601	TA7784P
IC421, IC422	UPC78M12H
Q107, Q108, Q606, Q612	2SA733
Q101	2SC1674
Q102, Q110, Q111, Q4011, Q4012	2SC1675
Q609−Q611	2SC2001
Q4011, Q4012	2SC2878
Q104−Q106, Q109, Q112, Q605, Q613, Q6011, Q6012, Q6031, Q6032, Q6041, Q6042, Q6071, Q6072, Q6081, Q6082	2SC945
Q103	2SK161
D601, D602	1N4002L
D103, D201, D202, D401, D603, D605−D608, D610−D613	1SS176T
D104A, D104B	AZQ7006
D421	AZQ7011
D101, D102	AZQ7012
D105, D107, D108, D604	HSS104−02
D614	MTZ4.7B
D106	MTZ5.6B

MAIN PCB ASSY (1/2), R/P SW PCB ASSY, CONNECTOR PCB ASSY

MAIN PCB assy (AZW7070) (2/2)

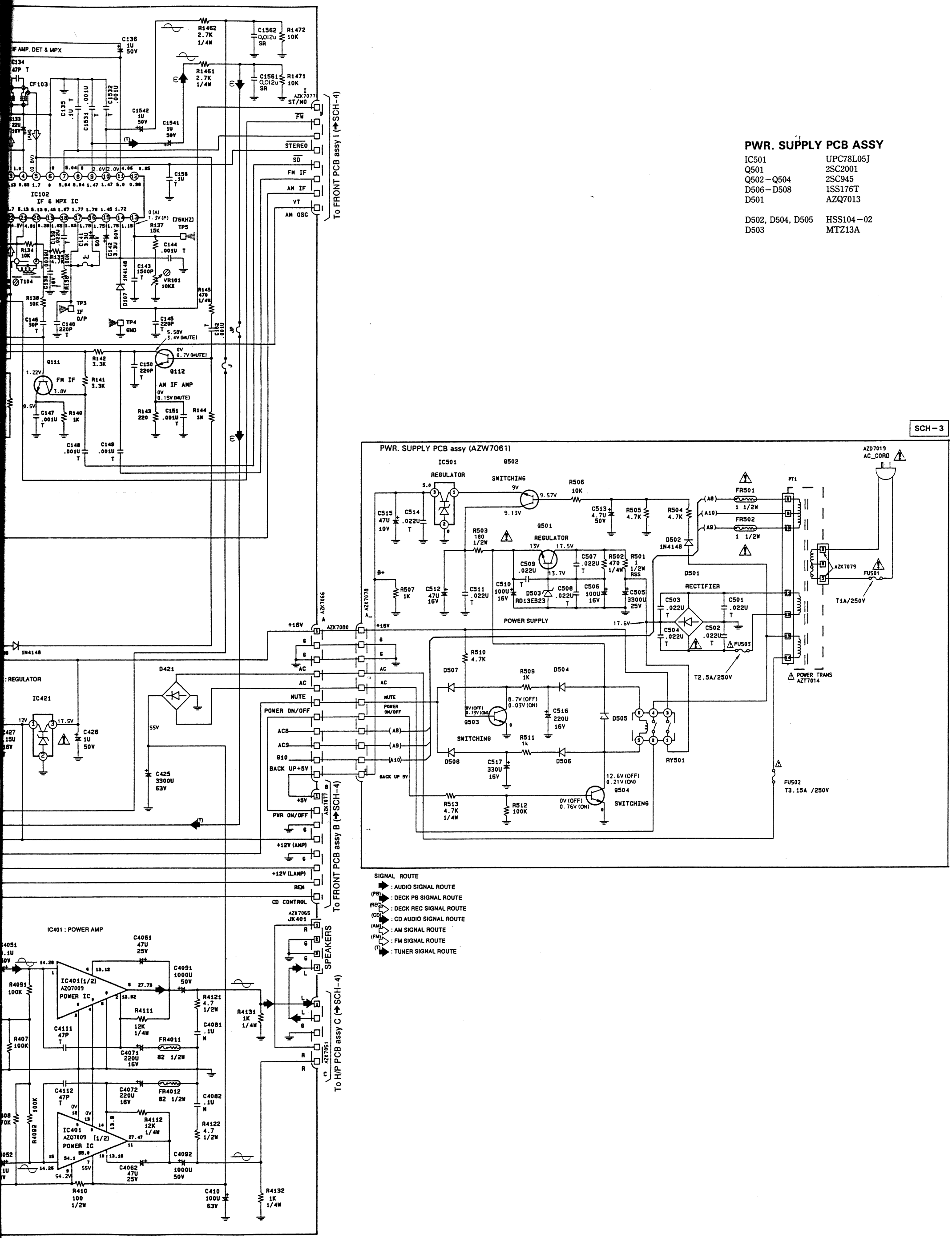


SCH−3

MAIN PCB ASSY (2/2), PWR. SUPPLY PCB ASSY

PWR. SUPPLY PCB ASSY

IC501	UPC78L05J
Q501	2SC2001
Q502 – Q504	2SC945
D506 – D508	1SS176T
D501	AZQ7013
D502, D504, D505	HSS104 – 02
D503	MTZ13A



SCH – 3

(4). FRONT PCB ASSY, H/P PCB ASSY, M. VR PCB ASSY AND VOL. IND PCB ASSY

FRONT PCB assy (AZW7071)

PIN NO.	VOLTAGE [V]	PIN NO.	VOLTAGE [V]	PIN NO.	VOLTAGE [V]	PIN NO.	VOLTAGE [V]
1	2.1	21	0/4.2 (MUTE)	41	2.1	61	2.1
2	0	22	0/4.2 (TAPE)	42	2.1	62	2.1
3	4.9	23	4.1	43	2.1	63	2.1
4	4.9	24	4.2	44	2.1	64	2.1
5	3.8	25	4.2	45	2.1	65	2.1
6	3.7	26	4.2	46	2.1	66	4.9
7	6/0.7	27	4.2	47	2.1	67	4.9
8	0 (F) 5 (A)	28	4.2	48	2.1	68	4.3
9	0	29	4.2	49	2.1	69	4.8
10	5	30	4.2	50	2.1	70	2.2
11	0/4	31	4.2	51	2.1	71	2.1
12	0/4	32	0	52	2.1	72	4.2
13	4 (M) 0 (S)	33	0	53	2.1	73	4.2
14	0 (B) 4	34	0	54	2.1	74	0 (A) /2.0 (F)
15	0	35	0	55	2.1	75	0 (F) /2.0 (A)
16	0	36	2.1	56	2.1	76	0
17	0	37	2.1	57	2.1	77	0.6
18	0	38	2.1	58	2.1	78	1.0
19	0/4.2	39	2.1	59	2.1	79	0
20	4.2	40	2.1	60	2.1	80	0

IC001

FRONT PCB ASSY

IC252	AZQ7014
IC001	AZQ7015
IC251	NJM4558LD
Q002 – Q008	2SC945
Q001	DTA114ES
D001, D002, D004, D005, D010, D012, D014, D015	1SS176T
D025, D026	AZA7089
D021 – D024	AZA7094
D003, D006 – D009, D016, D018, D020	HSS104 – 02
D251	MTZ4.7B

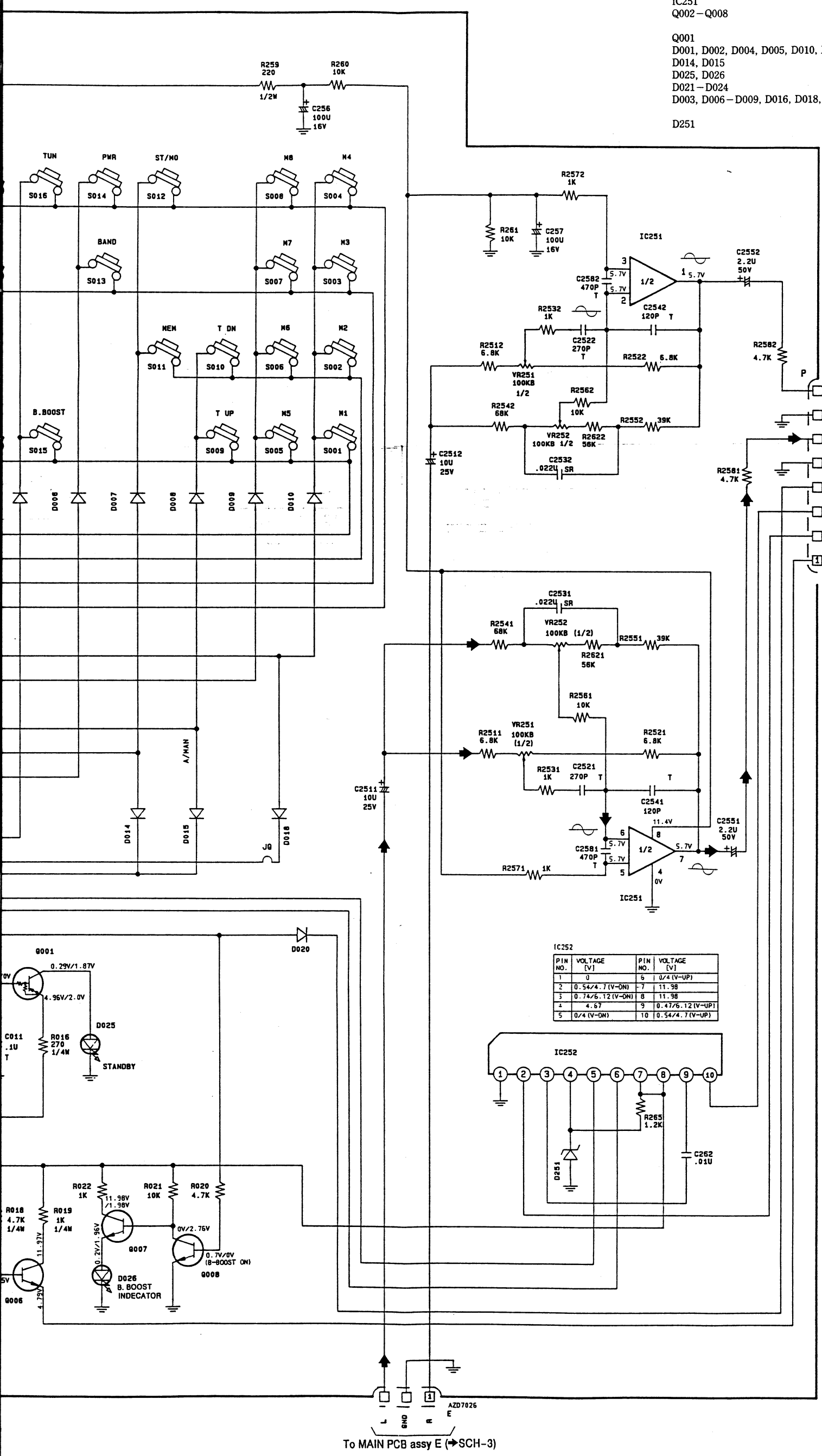
VOL. IND. PCB ASSY

D281	AZA7089

M. VR PCB ASSY

Q2811, Q2812	2SC2878

SCH – 4



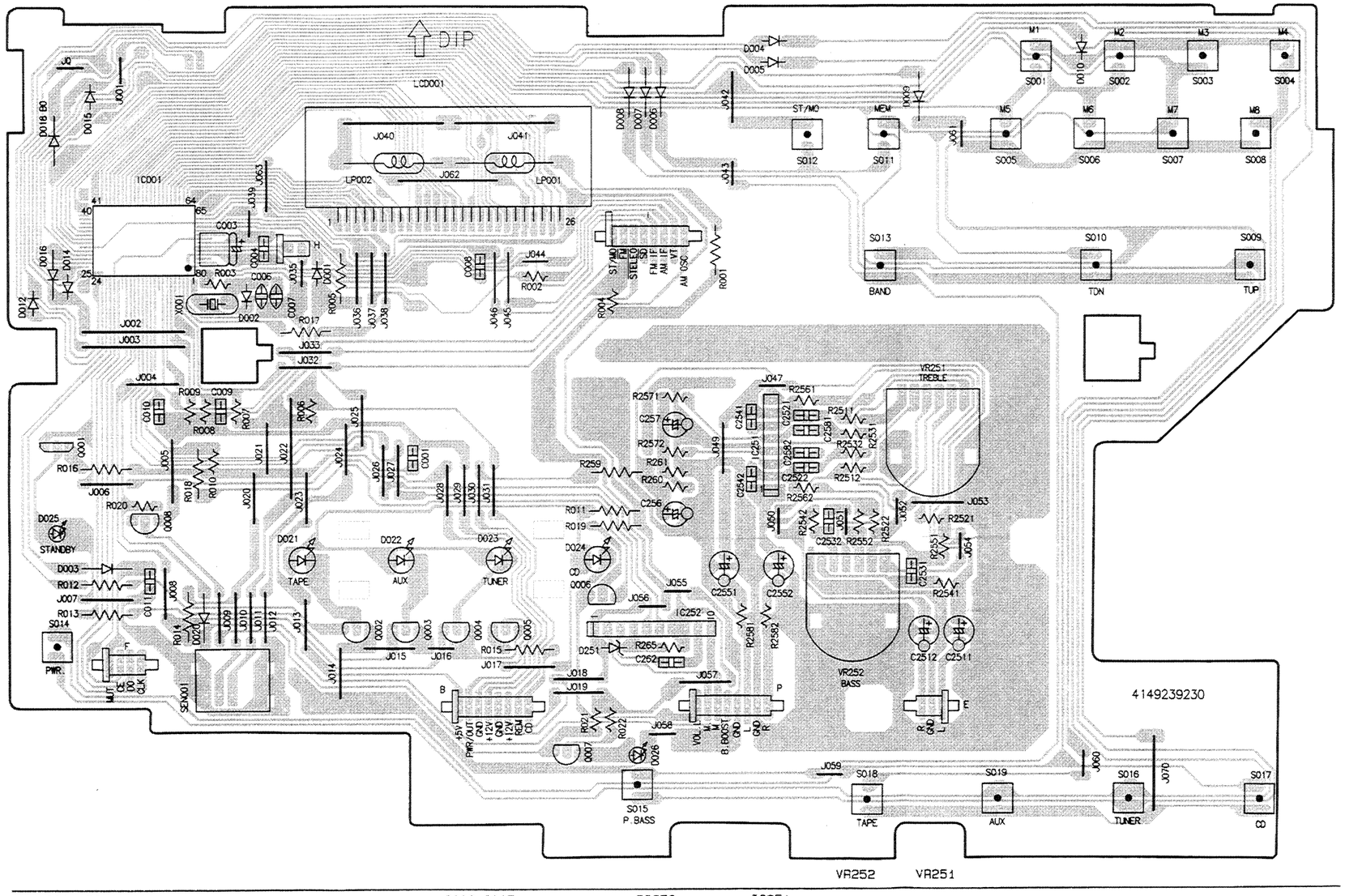
IC252			
PIN NO.	VOLTAGE [V]	PIN NO.	VOLTAGE [V]
1	0	6	0/4 (V–UP)
2	0.54/4.7 (V–ON)	7	11.98
3	0.74/6.12 (V–ON)	8	11.98
4	4.67	9	0.47/6.12 (V–UP)
5	0/4 (V–ON)	10	0.54/4.7 (V–UP)

FRONT PCB ASSY, H/P PCB ASSY,
M. VR PCB ASSY, VOL. IND PCB ASSY

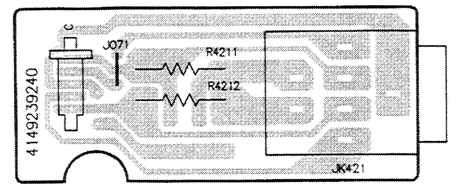
SCH – 4

• This diagram is viewed from the mounted parts side.

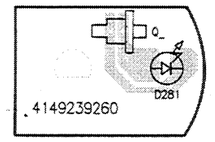
FRONT PCB assy



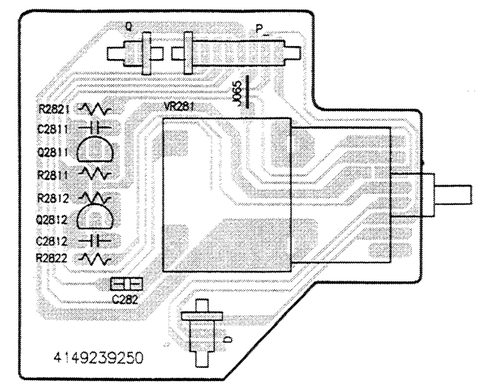
H/P PCB assy



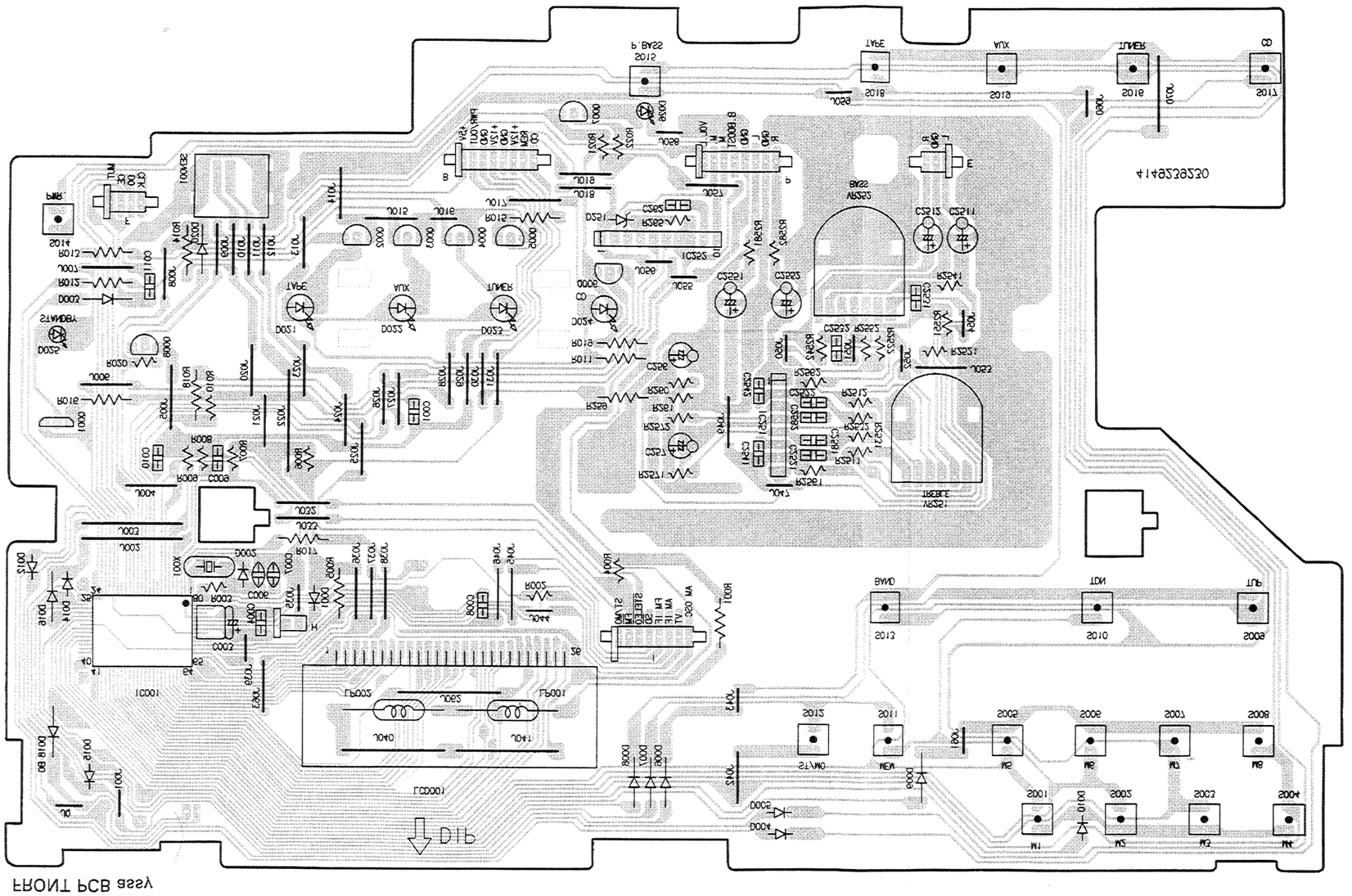
VOL. IND PCB assy

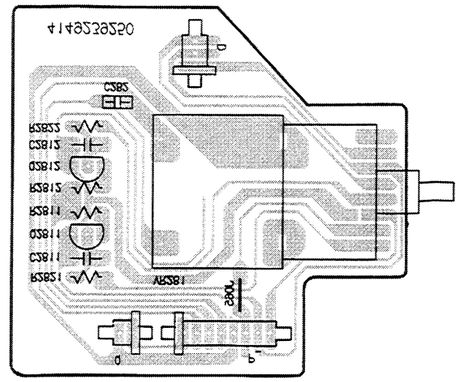


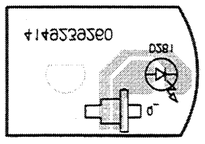
M. VR PCB assy

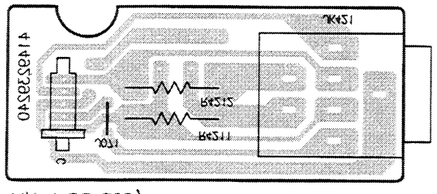


Q001 IC001 Q008 Q002-Q007 IC252 IC251


FRONT PCB assy
DIP
● This diagram is viewed from the foil side.


M. RV PCB assy


VOL. IND PCB assy


H\P PCB assy

XR-P540C

2.3 BLOCK DIAGRAM